SEARCH REQUEST FORM

	Requestor's Name:	Seri Nun	al nber:	
	Date:	Phone:	Art Unit: _	
	Search Topic: Please write a detailed statement of search to that may have a special meaning. Give exam a copy of the sequence. You may include a	ples or relevant citations, authors	keywords, etc., if known. For	rched. Define any terms sequences, please attach
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	2-28-03	STAFF USE ONLY	· · · · · · · · · · · · · · · · · · ·	
	Date completed: 03-28-03 Searcher: Bevery e-4	Search Site	Vend	IG Suite
	Terminal time: 24 Elapsed time:		M-1	STN Dialog
	CPU time:	Type of Sear	rch	APS
	Total time: 27 Number of Searches: 27		.A. Sequence	Geninfo SDC
Į.	Number of Databases:	St	ructure	DARC/Questel Other CGN
	•	Bi	ibliographic	- Other -

PTO-1590 (9-90)

USCOMM-DC 90-3952

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FILE 'REGISTRY' ENTERED AT 14:26:15 ON 28 MAR 2003
            13 S HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSG/SQSP
T.1
    ANSWER 1 OF 13 REGISTRY COPYRIGHT 2003 ACS
T.1
    474444-80-9 REGISTRY
RN
    L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-
CN
    phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-
    L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-
    glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-
    phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-
    lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-
    alanyl-L-prolyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
    4: PN: WOO2085406 SEQID: 7 unclaimed protein
CI
    39
SOL
        1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
SEO
           HITS AT:
          1 - 34
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 137:346934
REFERENCE
    ANSWER 2 OF 13 REGISTRY COPYRIGHT 2003 ACS
L1
     437134-20-8 REGISTRY
RN
    8: PN: WO0246227 SEQID: 9 unclaimed protein (9CI) (CA INDEX NAME)
CN
CI
    MAN
    39
SOL
        1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
SEO
           1-34
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 137:28591
     ANSWER 3 OF 13 REGISTRY COPYRIGHT 2003 ACS
T.1
     421042-94-6 REGISTRY
RN
     L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-
CN
     phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-
     L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-
     glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-
     phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-
     lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-
     alanyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)
     2: PN: WO0234285 SEQID: 7 unclaimed protein
CT
     MAN
SQL
     39
         1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
SEO
           HITS AT:
           1 - 34
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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Searcher :

308-4994

Shears

*REFERENCE 1: 136:350560 ANSWER 4 OF 13 REGISTRY COPYRIGHT 2003 ACS RN 309729-82-6 REGISTRY CN Exendin 3 (Heloderma horridum), 39a-[N6-[21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,10,19-trioxo-3,6,12,15-tetraoxa-9,18-diazaheneicos-1-yl]-L-lysinamide]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME) OTHER NAMES: 38: PN: WO0069911 PAGE: 71 claimed sequence CN SOL SEO 1 HSDGTFTSDL SKOMEEEAVR LFIEWLKNGG PSSGAPPPSK HITS AT: 1-34 **RELATED SEQUENCES AVAILABLE WITH SEOLINK** SEO 1 HSDGTFTSDL SKOMEEEAVR LFIEWLKNGG PSSGAPPPSK HITS AT: 1 - 34**RELATED SEQUENCES AVAILABLE WITH SEQLINK** SEO 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK HITS AT: 1-34 **RELATED ŞEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 134:13338 L1ANSWER 5 OF 13 REGISTRY COPYRIGHT 2003 ACS RN 309729-80-4 REGISTRY Exendin 3 (Heloderma horridum), 39a-[N6-[21-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,10,19-trioxo-3,6,12,15-tetraoxa-9,18-diazaheneicos-1-yl]-L-lysinamide]- (9CI) (CA INDEX NAME) COM, MAN CI SOL 40 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK HITS AT: 1 - 34**RELATED SEQUENCES AVAILABLE WITH SEOLINK** REFERENCE 1: 134:13338 L1ANSWER 6 OF 13 REGISTRY COPYRIGHT 2003 ACS RN 309257-17-8 REGISTRY CN 194: PN: WO0069900 SEQID: 373 unclaimed protein (9CI) (CA INDEX NAME) CI MAN SQL 40

Searcher: Shears 308-4994

1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK

SEO

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:21425

L1 ANSWER 7 OF 13 REGISTRY COPYRIGHT 2003 ACS

RN 308806-01-1 REGISTRY

CN L-Lysine, L-histidyl-L-seryl-L-alpha.-aspartylglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-alpha.-aspartyl-L-leucyl-L-seryl-L-lysyl-L-glutaminyl-L-methionyl-L-alpha.-glutamyl-L-alpha.-glutamyl-L-alpha.-glutamyl-L-leucyl-L-phenylalanyl-L-isoleucyl-L-alpha.-glutamyl-L-tryptophyl-L-leucyl-L-lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-seryl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 19: PN: WO0069911 SEQID: 19 claimed protein

CI MAN SQL 40

SEO 1 HSDGTFTSDL SKOMEEEAVR LFIEWLKNGG PSSGAPPPSK

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

L1 ANSWER 8 OF 13 REGISTRY COPYRIGHT 2003 ACS

RN 308249-28-7 REGISTRY

CN Exendin 3 (Heloderma horridum), 39a-[N6-[15-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1,7,13-trioxo-3,9-dioxa-6,12-diazapentadec-1-yl]-L-lysinamide]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

SQL 40

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK

HITS AT: 1-34

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:21425

L1 ANSWER 9 OF 13 REGISTRY COPYRIGHT 2003 ACS

RN 308249-20-9 REGISTRY

Exendin 3 (Heloderma horridum), 39a-[N6-[15-(2,5-dihydro-2,5-dioxo-CN 1H-pyrrol-1-yl)-1,7,13-trioxo-3,9-dioxa-6,12-diazapentadec-1-yl]-Llysinamide] - (9CI) (CA INDEX NAME) CI COM, MAN SOL 40 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK SEO _____ ___ _______ HITS AT: 1-34 **RELATED SEQUENCES AVAILABLE WITH SEQLINK** ANSWER 10 OF 13 REGISTRY COPYRIGHT 2003 ACS 308249-19-6 REGISTRY RN Exendin 3 (Heloderma horridum), 39a-[N6-[3-(2,5-dihydro-2,5-dioxo-1H-CN pyrrol-1-yl)-1-oxopropyl]-L-lysinamide]-, pentakis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME) OTHER NAMES: 35: PN: WO0069911 PAGE: 68 claimed sequence CN SQL 40 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK SEO HITS AT: 1 - 34**RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK SEQ ____________________________________ HITS AT: 1 - 34**RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK SEO _____ 1-34 HITS AT: **RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 134:21425 REFERENCE 2: 134:13338 ANSWER 11 OF 13 REGISTRY COPYRIGHT 2003 ACS L1308245-55-8 REGISTRY Exendin 3 (Heloderma horridum), 39a-[N6-[3-(2,5-dihydro-2,5-dioxo-1Hpyrrol-1-yl)-1-oxopropyl]-L-lysinamide]- (9CI) (CA INDEX NAME) COM, MAN CI SQL 4.0 1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPSK SEQ HITS AT: 1-34

Searcher: Shears 308-4994

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:13338

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ANSWER 12 OF 13 REGISTRY COPYRIGHT 2003 ACS
L1
     306277-48-5 REGISTRY
RN
     L-Serine, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-L-
CN
     phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-seryl-
     L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-
     glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-
     phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-
     lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-
     alanyl-L-prolyl-L-prolyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
     11: PN: WO0069911 SEQID: 11 claimed protein
CN
     185: PN: WO0069900 SEQID: 364 unclaimed protein
CN
     1: PN: WO0151078 SEQID: 1 unclaimed protein
CN
     2: PN: WO0066138 PAGE: 13 unclaimed protein
CN
     3: PN: US6284725 SEQID: 7 unclaimed protein
CN
     3: PN: WO0066142 TABLE: 1 unclaimed protein
CN
     5: PN: WO0077039 TABLE: 1 unclaimed protein
CN
     MAN
CI
SOL
     39
         1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
SEO
           HITS AT:
           1 - 34
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
            1: 135:205920
REFERENCE
REFERENCE
            2:
               135:132445
REFERENCE
            3:
               134:51920
            4:
               134:21425
REFERENCE
REFERENCE
            5:
               134:13338
               133:345167
REFERENCE
            6:
               133:345166
REFERENCE
            7.:
     ANSWER 13 OF 13 REGISTRY COPYRIGHT 2003 ACS
     130357-25-4 REGISTRY
     Exendin 3 (Heloderma horridum) (9CI) (CA INDEX NAME)
OTHER NAMES:
     11: PN: WO0041546 FIGURE: 1 claimed protein
     1: PN: WO0066629 FIGURE: 1 unclaimed sequence
     36: PN: WO0069911 PAGE: 69 claimed sequence
CN
     Exendin-3 (Heloderma horridum)
CN
     L-Serinamide, L-histidyl-L-seryl-L-.alpha.-aspartylglycyl-L-threonyl-
CN
     L-phenylalanyl-L-threonyl-L-seryl-L-.alpha.-aspartyl-L-leucyl-L-
     seryl-L-lysyl-L-glutaminyl-L-methionyl-L-.alpha.-glutamyl-L-.alpha.-
     glutamyl-L-.alpha.-glutamyl-L-alanyl-L-valyl-L-arginyl-L-leucyl-L-
     phenylalanyl-L-isoleucyl-L-.alpha.-glutamyl-L-tryptophyl-L-leucyl-L-
     lysyl-L-asparaginylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-
     alanyl-L-prolyl-L-prolyl-L-prolyl-
CI
     MAN
SQL
     39
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1 HSDGTFTSDL SKQMEEEAVR LFIEWLKNGG PSSGAPPPS
SEO
            HITS AT:
            1-34
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
             1: 137:88643
REFERENCE
             2: 135:376777
REFERENCE
             3: 134:37033
REFERENCE
             4: 134:13338
REFERENCE
             5: 133:359242
REFERENCE
REFERENCE
              6: 133:135612
              7: 133:129880
REFERENCE
REFERENCE
              8: 128:192936
              9: 123:74913
REFERENCE
REFERENCE 10: 121:222490
      FILE 'HCAPLUS' ENTERED AT 14:27:42 ON 28 MAR 2003
               20 S L1
L2
     ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                             2002:832649 HCAPLUS
ACCESSION NUMBER:
                             137:346934
DOCUMENT NUMBER:
                             Methods for treating conditions associated with
TITLE:
                             insulin resistance by administering a GLP-1
                             compound
                             Holst, Jens Juul; Olsen, Mette Zander; Hathaway,
INVENTOR(S):
                             David R.
                             Restoragen, Inc., USA
PATENT ASSIGNEE(S):
                             PCT Int. Appl., 60 pp.
SOURCE:
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
                             English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                                APPLICATION NO. DATE
      PATENT NO.
                     KIND DATE
                                                 _____
                                _____
      _____ ___
                                                WO 2002-US13088 20020424
                                20021031
                        A1
      WO 2002085406
               AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
               NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
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Searcher: Shears 308-4994

SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,

```
SN, TD, TG
                                          US 2001-285699P P 20010424
PRIORITY APPLN. INFO.:
     The present invention relates to methods and compns. for treating
     insulin-assocd. conditions comprising administering a glucagon-like
     peptide-1 (GLP-1) compd. to subjects suffering therefrom. The
     insulin resistance-assocd. condition of the invention is type-2
     pre-diabetes, atherosclerotic cardiovascular disease, drug-induced
     insulin resistance, congestive heart failure, diminished exercise
     capacity of skeletal muscle, and left ventricular dysfunction with
     cardiac metabolic myopathy or diminished exercise capacity of
     skeletal muscle; with the proviso that said congestive heart failure
     is not assocd. with toxic hypervolemia.
     474444-80-9
ΙT
     RL: PRP (Properties)
        (unclaimed protein sequence; methods for treating conditions
        assocd. with insulin resistance by administering a GLP-1 compd.)
                                 THERE ARE 11 CITED REFERENCES AVAILABLE
                          11
REFERENCE COUNT:
                                 FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                 IN THE RE FORMAT
     ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                          2002:449715 HCAPLUS
ACCESSION NUMBER:
                          137:28591
DOCUMENT NUMBER:
                          Preparation of GLP-1 fusion proteins for use in
TITLE:
                          treating diabetes mellitus and other conditions
                          Glaesner, Wolfgang; Micanovic, Radmilla;
INVENTOR(S):
                          Tschang, Sheng-Hung Rainbow
                          Eli Lilly and Company, USA
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 200 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                            APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
     _____ ___
                             _____
                                            WO 2001-US43165 20011129
     WO 2002046227
                      A2 20020613
         W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
              CH, CN, CO, CR, CU, CZ, CZ, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
              MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,
              SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
              ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
              SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
                                                                20011129
                                              AU 2002-26897
                              20020618
     AU 2002026897
                       Α5
                                           US 2000-251954P P
                                                                20001207
PRIORITY APPLN. INFO.:
                                           WO 2001-US43165 W 20011129
                          MARPAT 137:28591
OTHER SOURCE(S):
     The present invention relates to glucagon-like peptide-1 compds.
      fused to proteins that have the effect of extending the in vivo
     half-life of the peptides. The heterologous fusion proteins of the
      invention comprise a GLP-1 compd. fused to human albumin, a human
```

Searcher: Shears 308-4994

albumin analog or fragment, the Fc portion of an Ig, or an analog or

fragment of the Fc portion of an Ig. These fusion proteins can be used to treat non-insulin dependent diabetes mellitus as well as a variety of other conditions. Pharmaceutical formulations contg. the fusion proteins and polynucleotides encoding the proteins are also claimed.

ΙT 437134-20-8

RL: PRP (Properties)

(unclaimed protein sequence; prepn. of GLP-1 fusion proteins for use in treating diabetes mellitus and other conditions)

ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2003 ACS 2002:361520 HCAPLUS

ACCESSION NUMBER: 137:88643

DOCUMENT NUMBER:

Endoproteolysis by isolated membrane peptidases TITLE:

reveal metabolic stability of glucagon-like

peptide-1 analogs, exendins-3 and -4

Thum, A.; Hupe-Sodmann, K.; Goke, R.; Voigt, K.; AUTHOR(S):

Goke, B.; McGregor, G. P.

Institute of Physiology, Philipps-University, CORPORATE SOURCE:

Marburg, D-35037, Germany

Experimental and Clinical Endocrinology & SOURCE:

> Diabetes (2002), 110(3), 113-118 CODEN: ECEDFQ; ISSN: 0947-7349

Johann Ambrosius Barth PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

These in vitro studies aimed to characterize the pattern and the AB kinetics of endoproteolysis of the insulinotropic hormone glucagon-like peptide-1 (GLP-1) and related peptides by native ectopeptidases. Peptides were incubated with isolated rat or pig kidney brush-border microvilli membranes, which are a rich source of the ectopeptidases that are responsible for the post-secretory metab. of peptide hormones. The proteolytic products were sepd. by reversed-phase HPLC column chromatog. and characterized by mol. mass and primary structure. The relative importance of specific peptidases was established by measuring the effects of specific peptidase inhibitors on the kinetics of proteolysis. Dipeptidyl-peptidase-IV was found to be rate-limiting in the endoproteolysis of GLP-1. GLP-1 homologs, exendins-3 and -4, exhibited exceptional stability in the presence of isolated kidney microvilli membranes. Our finding that exendin-4 is several orders of magnitude more stable than GLP-1 and Ser-8-GLP-1 is esp. noteworthy given this peptide's widely reported insulinotropic potency.

130357-25-4, Exendin 3 (Heloderma horridum)

RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics);

BIOL (Biological study)

(endoproteolysis by isolated membrane peptidases reveal metabolic stability of glucagon-like peptide-1 analogs and exendin-3 and -4)

REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE 32 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:332051 HCAPLUS

DOCUMENT NUMBER: 136:350560

Treatment of hibernating myocardium and diabetic TITLE:

> 308-4994 Searcher : Shears

cardiomyopathy with a GLP-1 peptide

INVENTOR(S):

Ehlers, Mario Coolidge, Thomas R., USA PCT Int. Appl., 26 pp. CODEN: PIXXD2 PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT N	١٥.	KIND	DATE				PPLI	CATI	ON N	ο.	DATE		
	WO 20020 W:	AE, AG, CN, CO, GE, GH, LC, LK, NO, NZ, TR, TT,	A2 AL, Al CR, Cl GM, H LR, L PH, Pl TZ, U	2002 M, AT, U, CZ, R, HU, S, LT, L, PT, A, UG,	0502 AU, DE, ID, LU, RO,	AZ, DK, IL, LV, RU,	BA, DM, IN, MA, SD,	BB, DZ, IS, MD, SE,	BG, EC, JP, MG, SG,	BR, EE, KE, MK, SI,	BY, ES, KG, MN, SK,	FI, KP, MW, SL,	CA, GB, KR, MX, TJ,	GD, KZ, MZ, TM,
	RW:	KZ, MD, GH, GM, CY, DE, TR, BF, TD, TG	KE, L	S, MW, S, FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,
	AU 20020	014618	A5				A					2001	1022	
	US 20021	146405	A1	2002	1010		U			8297				
PRIC	RITY APPI	LN. INFO	.:				US 20 US 20 US 20 WO 20	000-: 000-: 001-:	2421 2452 US32	39P 34P 559	P P W	2000 2000 2000 2001	1023 1103 1022	
AB IT		d functi s retain ments of norepin bernatin lamines educes p d of tre yopathy.	on due cellu contre ephring myoclead telasma ating ties) rotein	to lo lar in action e, are ardium o card norepinibern seque	cali tegr . H bel . L iomy neph atin	zed ity, igh ieve ikew opat rine g my tre	reduction but plass discontinuous discontinu	ced can ma le high high high high high high high hi	perf not evel pred h le tien and or	usionsusts of ictivels ts with diab	n. ain cat ve of ith thus etic	Hibe high secho of mo diab	rnat -ene lami rtal etes usef	ing rgy nes, ity ul in
DOCU TITI INVE PATE SOUF DOCU LANG	NTOR(S): NT ASSIGN	MBER: BER: NEE(S): E: NUM. COU	2 1 P- B P- C- P	US CO 001:85 35:376 eptide olmqui ionebr CT Int DDEN: atent nglish	0956 777 pha st, aska . Ap	HC rmac Bart , In pl.,	APLU: euti on;	S cal Dorm USA	form					

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APPLICATION NO. DATE
                          KIND DATE
      PATENT NO.
                                                      _____
                           ----
      _____
     WO 2001087322 A2 20011122
WO 2001087322 A3 20020718
                                                      WO 2001-US15872 20010517
                                   20011122
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
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                TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
                                                    US 2001-858880
                                                                            20010517
                          A1 20020523
      US 2002061838
                                                   US 2000-205377P P 20000517
PRIORITY APPLN. INFO.:
                                                   US 2000-205262P P 20000519
      A pharmaceutical compn. for administration to a mammal is disclosed.
AB
      The compn. includes a therapeutically effective amt. of a peptide,
      such as a GLP-1 mol., a PTH mol., or a GRF mol. The compn. further
      includes a buffer including a weak acid having an acid dissocn.
      const. value of greater than about 1x10-5, such as acetic acid.
      compn. also includes an excipient for making the compn. generally
      isotonic, such as D-mannitol.
      130357-25-4, Exendin 3 (Heloderma horridum)
IT
      RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC
      (Process); USES (Uses)
          (peptide pharmaceutical formulations relating to parathormone,
          glucagon-like peptide-1, and growth hormone-releasing factor)
      ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                               2001:650487 HCAPLUS
ACCESSION NUMBER:
                                135:205920
DOCUMENT NUMBER:
                               Metabolic intervention with GLP-1 to improve the
TITLE:
                               function of ischemic and reperfused tissue
                               Coolidge, Thomas R.; Ehlers, Mario R. W.
INVENTOR(S):
                               BioNebraska, Inc., USA
PATENT ASSIGNEE(S):
                               U.S., 10 pp.
SOURCE:
                               CODEN: USXXAM
DOCUMENT TYPE:
                                Patent
                               English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:
                                                     APPLICATION NO. DATE
                      KIND DATE
      PATENT NO.
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                                                                             19990430
      US 6284725 B1 20010904
                                                     US 1999-302596
                                                      WO 2000-US11251 20000427
                           A2 20001109
      WO 2000066138
                          A3 20010705
      WO 2000066138
                AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
           CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                             EP 2000-926404 20000427
                        A2 20020123
     EP 1173197
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
              PT, IE, SI, LT, LV, FI, RO
     NZ 514610
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                                              NZ 2000-514610
                                                                20000427
     JP 2002543142
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                              20021217
                                              JP 2000-615022
                                                                20000427
                                              US 2001-851738
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                                              US 2001-953021
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                                                                20010911
     NO 2001005294
                              20011228
                                              NO 2001-5294
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                                           US 1998-103498P
                                                            P 19981008
PRIORITY APPLN. INFO.:
                                           US 1999-302596
                                                             A 19990430
                                           WO 2000-US11251 W 20000427
                                           US 2001-851738
                                                             A1 20010509
     Individuals in need of treatment of ischemia-related reperfusion are
AB
     treated, preferably i.v., with a compn. which includes a compd.
     which binds to a receptor for the glucagon-like peptide-1. The
     invention relates to both the method and compns. for such treatment.
TΤ
     306277-48-5
     RL: PRP (Properties)
         (unclaimed protein sequence; metabolic intervention with GLP-1 to
        improve the function of ischemic and reperfused tissue)
REFERENCE COUNT:
                                 THERE ARE 7 CITED REFERENCES AVAILABLE FOR
                                 THIS RECORD. ALL CITATIONS AVAILABLE IN
                                 THE RE FORMAT
     ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                           2001:525943 HCAPLUS
ACCESSION NUMBER:
                           135:132445
DOCUMENT NUMBER:
TITLE:
                           Use of exendins and agonists thereof for
                          modulation of triglyceride levels and treatment
                           of dyslipidemia
                           Kolterman, Orville Gene; Young, Andrew A.
INVENTOR(S):
                           Amylin Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                           PCT Int. Appl., 161 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
                           3
PATENT INFORMATION:
                                            APPLICATION NO. DATE
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                     KIND DATE
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                      A1 20010719
                                            WO 2001-US719 20010109
     WO 2001051078
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              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
              LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
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              TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
                                             EP 2001-900978
     EP 1246638
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

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20010109
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     US 2003036504
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                                        US 2000-175365P P 20000110
PRIORITY APPLN. INFO .:
                                                         W 20010109
                                        WO 2001-US719
    Methods for modulating the levels of plasma triglyceride and other
     lipids in a subject comprise administration of an effective amt. of
     an exendin or exendin agonist, alone or in conjunction with other
     compds. or compns. that lower blood triglyceride and/or other lipid
     levels.
     306277-48-5
ΤT
     RL: PRP (Properties)
        (unclaimed protein sequence; use of exendins and agonists thereof
        for modulation of triglyceride levels and treatment of
        dyslipidemia)
                               THERE ARE 7 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                               THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
     ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2003 ACS
L2
                         2000:900675 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         134:51920
                         GLP-1 as a diagnostic test to determine
TITLE:
                          .beta.-cell function and the presence of
                         impaired glucose tolerance (IGT) and type-II
                         diabetes
                         Holst, J. J.; Vilsboll, Tina
INVENTOR(S):
                         Bionebraska, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 42 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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                                           WO 2000-US16428 20000614
     WO 2000077039
                       A2
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             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
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             PT, IE, SI, LT, LV, FI, RO
                                         US 1999-333415 A 19990615
WO 2000-US16428 W 20000614
PRIORITY APPLN. INFO.:
     Since glucagon-like peptide-1 (GLP-1) is the most potent
     insulinotropic hormone known and has been shown to stimulate insulin
     secretion strongly in patients with type II diabetes, this invention
     uses GLP-1 or its biol. active analogs in .beta.-cell stimulatory
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Searcher: Shears 308-4994

tests in order to test .beta.-cell function in a simple way. The test provides information about insulin secretory capacity, is easy

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and reproducible and has insignificant side effects.
     306277-48-5
TΤ
     RL: PRP (Properties)
        (unclaimed protein sequence; gLP-1 as a diagnostic test to det.
        .beta.-cell function and the presence of impaired glucose
        tolerance (IGT) and type-II diabetes)
     ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2003 ACS
L_2
                         2000:861704 HCAPLUS
ACCESSION NUMBER:
                         134:37033
DOCUMENT NUMBER:
                         Use of exendins and agonists thereof for the
TITLE:
                         treatment of gestational diabetes mellitus
                         Hiles, Richard; Prickett, Kathryn S.
INVENTOR(S):
                         Amylin Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 133 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
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     US 6506724
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     JP 2003501361
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                       T2 20030114
                                        US 1999-323867 A 19990601
PRIORITY APPLN. INFO.:
                                        WO 2000-US14231 W 20000523
     Methods for treating gestational diabetes which comprise
AB
     administration of an effective amt. of an exendin or an exendin
     agonist, alone or in conjunction with other compds. or compns. that
     lower blood glucose levels.
     130357-25-4, Exendin 3 (Heloderma horridum)
ΙΤ
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (use of exendins and agonists thereof for treatment of
        gestational diabetes mellitus in relation to combination with
        insulin or amylin agonist)
     ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                         2000:824301 HCAPLUS
ACCESSION NUMBER:
                         134:13338
DOCUMENT NUMBER:
                         Long lasting insulinotropic peptides
TITLE:
                         Bridon, Dominique P.; L'Archeveque, Benoit;
INVENTOR(S):
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Ezrin, Alan M.; Holmes, Darren L.; Leblanc,

APPLICATION NO.

Anouk; St. Pierre, Serge

PATENT ASSIGNEE(S):

Conjuchem, Inc., Can. PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DATE

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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                                         WO 2000-US13563 20000517
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PRIORITY APPLN. INFO.:
                                        US 1999-159783P
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                                                            19990910
                                                         A3 20000517
                                        EP 2000-932570
                                                            20000517
                                        WO 2000-IB763
                                                         W
                                                         W
                                                            20000517
                                        WO 2000-US13563
                                                         A3 20000905
                                        US 2000-623618
     Modified insulinotropic peptides are disclosed. The modified
AB
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insulinotropic peptides are capable of forming a peptidase stabilized insulinotropic peptide. The modified insulinotropic peptides are capable of forming covalent bonds with one or more blood components to form a conjugate. The conjugates may be formed in vivo or ex vivo. The modified peptides are administered to treat humans with diabetes and other related diseases.

IT 306277-48-5 308245-55-8 308806-01-1 309729-80-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(long lasting insulinotropic peptides with antidiabetic activity)

IT 130357-25-4P, Exendin 3 (Heloderma horridum)

308249-19-6P 309729-82-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(long lasting insulinotropic peptides with antidiabetic activity)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN
THE RE FORMAT

L2 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:824291 HCAPLUS

DOCUMENT NUMBER:

134:21425

TITLE: Protection

Protection of endogenous therapeutic peptides from peptidase activity through conjugation to

blood components

INVENTOR(S):

Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen

PATENT ASSIGNEE(S):

Conjuchem, Inc., Can.

COURCE .

PCT Int. Appl., 733 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English 3

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT 1	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	э.	DATE		
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WO	2000	0699	0 C	C:	2	2002	0704									
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WO	20000	0706	65	A.	3	2001	0419									
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		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,
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             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
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                                        US 1999-134406P P
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PRIORITY APPLN. INFO.:
                                        US 1999-153406P P
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                                        US 1999-159783P
                                                        P 19991015
                                        EP 2000-932570
                                                         A3 20000517
                                        WO 2000-IB763
                                                         W
                                        WO 2000-US13576 W 20000517
    A method for protecting a peptide from peptidase activity in vivo,
AΒ
    the peptide being composed of between 2 and 50 amino acids and
    having a C-terminus and an N-terminus and a C-terminus amino acid
    and an N-terminus amino acid is described. In the first step of the
    method, the peptide is modified by attaching a reactive group to the
    C-terminus amino acid, to the N-terminus amino acid, or to an amino
     acid located between the N-terminus and the C-terminus, such that
    the modified peptide is capable of forming a covalent bond in vivo
    with a reactive functionality on a blood component. The solid phase
    peptide synthesis of a no. of derivs. with 3-maleimidopropionic acid
     (3-MPA) is described. In the next step, a covalent bond is formed
    between the reactive group and a reactive functionality on a blood
     component to form a peptide-blood component conjugate, thereby
    protecting said peptide from peptidase activity. The final step of
     the method involves the analyzing of the stability of the
    peptide-blood component conjugate to assess the protection of the
    peptide from peptidase activity. Thus, the percentage of a K5
     kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH2) conjugated to
     human serum albumin via MPA remained relatively const. through a
     24-h plasma assay in contrast to unmodified K5 which decreased to 9%
     of the original amt. of K5 in only 4 h in plasma.
ΙT
     308249-19-6P 308249-28-7P
    RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
     reagent); USES (Uses)
        (protection of endogenous therapeutic peptides from peptidase
        activity through conjugation to blood components)
     306277-48-5 309257-17-8
ΙT
     RL: PRP (Properties)
        (unclaimed protein sequence; protection of endogenous therapeutic
        peptides from peptidase activity through conjugation to blood
        components)
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Searcher: Shears 308-4994

HCAPLUS COPYRIGHT 2003 ACS 2000:790546 HCAPLUS

133:359242

ANSWER 12 OF 20

ACCESSION NUMBER: DOCUMENT NUMBER:

Modified exendins and exendin agonists TITLE: Young, Andrew; Prickett, Kathryn INVENTOR(S): Amylin Pharmaceuticals, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 119 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE ----_____ 20001109 WO 2000-US11814 20000428 WO 2000066629 A1 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 2000-928685 20000428 A1 20020130 EP 1175443 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO BR 2000-10705 20000428 BR 2000010705 A 20020205 JP 2000-615657 20000428 JP 2002544127 T2 20021224 US 1999-132018P P 19990430 PRIORITY APPLN. INFO.: WO 2000-US11814 W 20000428 Novel modified exendins and exendin agonists having an exendin or AR exendin agonist linked to one or more polyethylene glycol polymers, for example, and related formulations and dosages and methods of administration thereof are provided. These modified exendins and exendin agonists, compns. and methods are useful in treating diabetes and conditions that would be benefited by lowering plasma glucose or delaying and/or slowing gastric emptying or inhibiting food intake. 130357-25-4, Exendin 3 (Heloderma horridum) RL: PRP (Properties) (unclaimed sequence; modified exendins and exendin agonists) THERE ARE 6 CITED REFERENCES AVAILABLE FOR 6 REFERENCE COUNT: THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2003 ACS 2000:790326 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 133:345167 Metabolic intervention with GLP-1 or its TITLE: biologically active analogues to improve the function of the ischemic and reperfused brain Coolidge, Thomas R.; Ehlers, Mario R. W. INVENTOR(S): PATENT ASSIGNEE(S): Bionebraska, Inc., USA PCT Int. Appl., 19 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent

Searcher: Shears 308-4994

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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APPLICATION NO. DATE
                       KIND DATE
     PATENT NO.
                                              _____
                       ____
                             _____
                                            WO 2000-US11652 20000501
     WO 2000066142
                       A2
                             20001109
     WO 2000066142
                      A3
                             20020124
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
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             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
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         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 1999-303016 19990430
EP 2000-928616 20000501
                      B1 20020806
     US 6429197
     EP 1187628
                       A2
                            20020320
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
     JP 2002543145
                      T2 20021217
                                             JP 2000-615026
                                                               20000501
                                            NO 2001-5298
     NO 2001005298
                       Α
                             20011228
                                                               20011029
                                                           A 19990430
                                          US 1999-303016
PRIORITY APPLN. INFO.:
                                        US 1998-103498P P 19981008
                                          WO 2000-US11652 W 20000501
     It has now been discovered that GLP-1 treatment after acute stroke
AΒ
     or hemorrhage, preferably i.v. administration, can be an ideal
     treatment because it provides a means for optimizing insulin
     secretion, increasing brain anabolism, enhancing insulin
     effectiveness by suppressing glucagon, and maintaining euglycemia or
     mild hypoglycemia with no risk of severe hypoglycemia.
ΙT
     306277-48-5
     RL: PRP (Properties)
        (unclaimed protein sequence; metabolic intervention with GLP-1 or
        its biol. active analogs to improve the function of the ischemic
        and reperfused brain)
     ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                          2000:790323 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          133:345166
                          Metabolic intervention with GLP-1 to improve the
TITLE:
                          function of ischemic and reperfused tissue
                          Coolidge, Thomas R.; Ehlers, Mario R. W.
INVENTOR(S):
                          Bionebraska, Inc., USA
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 22 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                            APPLICATION NO. DATE
                    KIND DATE
                                             _____
                                             WO 2000-US11251 20000427
     WO 2000066138 A2
                             20001109
                            20010705
     WO 2000066138
                       АЗ
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
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YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            US 1999-302596
     US 6284725
                        В1
                              20010904
                                                                19990430
                                             EP 2000-926404
     EP 1173197
                        A2
                              20020123
                                                                20000427
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
                              20020927
                                              NZ 2000-514610
                                                                20000427
                        Α
     JP 2002543142
                        Т2
                              20021217
                                              JP 2000-615022
                                                                20000427
     NO 2001005294
                              20011228
                                              NO 2001-5294
                                                                20011029
                        Α
                                           US 1999-302596
PRIORITY APPLN. INFO.:
                                                             Α
                                                                19990430
                                           US 1998-103498P
                                                            P
                                                                19981008
                                                            W 20000427
                                           WO 2000-US11251
     Individuals in need of treatment of ischemia-related reperfusion are
AB
     treated, preferably i.v., with a compn. which includes a compd.
     which binds to a receptor for the glucagon-like peptide-1. The
     invention relates to both the method and compns. for such treatment.
IΤ
     306277-48-5
     RL: PRP (Properties)
         (unclaimed sequence; metabolic intervention with GLP-1 to improve
        the function of ischemic and reperfused tissue)
     ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                          2000:493318 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                           133:129880
TITLE:
                          Methods using an exendin or related substance
                           for glucagon suppression
INVENTOR(S):
                          Young, Andrew; Gedulin, Bronislava
                          Amylin Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 96 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                       KIND
                              DATE
                                             APPLICATION NO.
                                                                DATE
     WO 2000041548
                        A2
                              20000720
                                              WO 2000-US942
                                                                20000114
     WO 2000041548
                        АЗ
                              20001130
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
              BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2356331
                              20000720
                                            CA 2000-2356331 20000114
                        AA
     EP 1143989
                                              EP 2000-902415
                        A2
                              20011017
                                                                20000114
     EP 1143989
                              20020911
                        A3
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
                              20011120
     BR 2000007823
                                              BR 2000-7823
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                        А
     JP 2002538084
                        Т2
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                                              JP 2000-593169
                                                                20000114
     NO 2001003469
                        Α
                              20010914
                                              NO 2001-3469
                                                                20010712
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PRIORITY APPLN. INFO.:
                                         US 1999-116380P P
                                                             19990114
                                         US 1999-132017P P
                                                             19990430
                                         US 2000-175365P P
                                                             20000110
                                                          W 20000114
                                         WO 2000-US942
     Methods are provided for use of an exendin, an exendin agonist, or a
AB
     modified exendin or exendin agonist having an exendin or exendin
     agonist linked to one or more polyethylene glycol polymers, for
     example, for lowering glucagon levels and/or suppressing glucagon
     secretion in a subject. These methods are useful in treating
     hyperglucagonemia and other conditions that would be benefited by
     lowering plasma glucagon or suppressing glucagon secretion.
     130357-25-4P, Exendin 3 (Heloderma horridum)
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (exendin or related substance for glucagon suppression)
     ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2003 ACS
                         2000:493315 HCAPLUS
ACCESSION NUMBER:
                         133:135612
DOCUMENT NUMBER:
                         Novel exendin agonist formulations and methods
TITLE:
                         of administration thereof
                         Young, Andrew; L'Italien, James J.; Kolterman,
INVENTOR(S):
                         Orville
                         Amylin Pharmaceuticals, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 281 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                          APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
     WO 2000041546
                     A2 20000720
                                          WO 2000-US902 20000114
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           CA 2000-2356706 20000114
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     CA 2356706
                       AA
                             20011010
                                            EP 2000-914425
                                                              20000114
                       A2
     EP 1140145
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
                                            BR 2000-7820
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     BR 2000007820
                      A
                             20011120
                                            JP 2000-593167
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                       T2
                             20021015
     JP 2002534450
                             20010914
     NO 2001003468
                                           NO 2001-3468
                                                              20010712
                       Α
                                         US 1999-116380P P
                                                             19990114
PRIORITY APPLN. INFO.:
                                         US 2000-175365P P
                                                              20000110
                                                          W 20000114
                                         WO 2000-US902
     Novel exendin and exendin agonist compd. formulations and dosages
AB
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Searcher: Shears 308-4994

and methods of administration thereof are provided. These compns. and methods are useful in treating diabetes and conditions that

would be benefited by lowering plasma glucose or delaying and/or slowing gastric emptying or inhibiting food intake. 130357-25-4P, Exendin-3 (Heloderma horridum) ΙT RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses) (amino acid sequence; novel exendin agonist formulations and methods of administration thereof as antidiabetic agents and appetite suppressants) ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2003 ACS 1998:112250 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 128:192936 Preparation of exendin peptide analogs as TITLE: agonists for regulating gastrointestinal motility Young, Andrew A.; Gedulin, Bronislava; Beeley, INVENTOR(S): Nigel Robert Arnold; Prickett, Kathryn S. Amylin Pharmaceuticals, Inc., USA; Young, Andrew PATENT ASSIGNEE(S): A.; Gedulin, Bronislava; Beeley, Nigel Robert Arnold; Prickett, Kathryn S. SOURCE: PCT Int. Appl., 70 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. ____**_** _____ A1 19980212 WO 1997-US14199 19970808 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG A1 19980225 AU 1997-40636 19970808 AU 9740636 EP 1997-938261 19970808 EP 966297 A1 19991229 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI JP 2001501593 Т2 20010206 JP 1998-508263 19970808 US 1996-694954 A 19960808 PRIORITY APPLN. INFO.: WO 1997-US14199 W 19970808 MARPAT 128:192936 OTHER SOURCE(S): Methods for reducing gastric motility and delaying gastric emptying for therapeutic and diagnostic purposes are disclosed which comprise administration of an effective amt. of an exendin or an exendin agonist H-Xaa1-Xaa2-Xaa3-Gly-Thr-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Ser-Lys-Gln-Xaa9-Glu-Glu-Glu-Ala-Val-Arg-Leu-Xaa10-Xaa11-Xaa12-Xaa13-Leu-Lys-Asn-Gly-Gly-Xaa14-Ser-Ser-Gly-Ala-Xaa15-Xaa16-Xaa17-Xaa18-Z [Xaa1 = His, Arg, Tyr; Xaa2 = Ser, Gly, Ala, Thr; Xaa3, Xaa7, Xaa12 = independently Asp, Glu; Xaa4, Xaa10 = independently Phe, Tyr,

naphthylalanine; Xaa5, Xaa6 = independently Thr, Ser; Xaa8, Xaa9 = independently Leu, Ile, Val, pentylglycine, Met; Xaa11 = any group Xaa8, tert-butylglycine; Xaa13 = any group Xaa4, Trp; Xaa14-Xaa17 =
independently Pro, homoproline, 3-Hyp, 4-Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine, N-alkylalanine; Xaa18 = Ser, Thr, Tyr; Z = OH, NH2; with the proviso that the compd. does not have the formula of exendin-3 or exendin-4] or a pharmaceutically acceptable salt thereof. Methods for treating conditions assocd. with elevated, inappropriate, or undesired post-prandial blood glucose levels are disclosed which comprise administration of an effective amt. of an exendin or an exendin agonist alone or in conjunction with other anti-gastric emptying agents. Thus, exendin-4 acid and [Leu14, Phe25] -exendin-4, prepd. by std. solid-phase methods on a 4-(2,4-dimethoxyphenyl)-Fmocaminomethylphenoxyacetamide norleucine-MBHA resin using 9-fluorenylmethoxycarbonyl (Fmoc)-protected amino acids, inhibited gastric emptying in male HSD rats with EC50 = 0.12 and 0.29 .mu.g. Exendin-4 showed EC50 = 0.27 .mu.g under the same conditions. 130357-25-4P, Exendin-3 (Heloderma horridum) RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(prepn. of exendin peptide analogs as agonists for regulating gastrointestinal motility)

REFERENCE COUNT:

THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2003 ACS 1995:675100 HCAPLUS ACCESSION NUMBER:

12

123:74913 DOCUMENT NUMBER:

Exendin-3 and exendin-4 polypeptides, and TITLE: pharmaceutical compositions comprising them

Eng, John INVENTOR(S):

PATENT ASSIGNEE(S): USA

U.S., 17 pp. SOURCE: CODEN: USXXAM

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE ____ US 1993-66480 19930524 19950613 US 5424286 A US 1993-66480 19930524 PRIORITY APPLN. INFO.:

This invention encompasses pharmaceutical compns. contg. exendin-3 or exendin-4, fragments thereof, or any combination thereof, and methods for the treatment of diabetes mellitus and the prevention of hyperglycemia.

130357-25-4, Exendin 3 (Heloderma horridum)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(exendin-3 and exendin-4 polypeptides, and pharmaceutical compns. comprising them)

> 308-4994 Shears Searcher :

ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:622490 HCAPLUS

DOCUMENT NUMBER: 121:222490

Use of 125I-[Y39]exendin-4 to characterize TITLE:

exendin receptors on dispersed pancreatic acini

and gastric chief cells from guinea pig

AUTHOR(S):

Singh, Gurcharn; Eng, John; Raufman, Jean-Pierre Gastrointestinal Cell Biology Laboratory, State CORPORATE SOURCE:

University of New York-Health Science Center at

Brooklyn, 450 Clarkson Avenue-Box 1196, Brooklyn, NY, 11203-2098, USA

SOURCE: Regulatory Peptides (1994), 53(1), 47-59

CODEN: REPPDY; ISSN: 0167-0115

DOCUMENT TYPE: Journal LANGUAGE: English

We synthesized and iodinated an exendin-4 analog, [Y39] exendin-4 (700 Ci/mmol), for use as a radioligand to characterize exendin receptors on dispersed pancreatic acini and gastric chief cells from guinea pig. Binding of this bioactive radioligand was rapid, temp.-dependent and specific (not inhibited by other pancreatic or gastric secretagogues). Measurement of the ability of exendin-4 to inhibit the binding of 125I-[Y39]exendin-4 indicated the presence of two classes of receptors. Pancreatic acini had 12.5 .times. 1010 binding sites/mg acinar protein of which 6% were high affinity (Kd = 0.5~nM) and 94% were low affinity (Kd = 0.1~.mu.M). Chief cells had 3370 binding sites/cell of which 9% were high affinity (Kd = 0.3 nM) and 91% were low affinity (Kd = 0.2 .mu.M). Washing with 0.2 M acetic acid (pH 2.5), 0.2 M glycine (pH 10.5), or trypsin (100 .mu.g/mL) after 30 min incubation at 37.degree., indicated that 63 and 49% of radioligand was internalized in acini and chief cells, resp. Truncated glucagon-like peptide-1 (tGLP-1), a mammalian peptide sharing 53% homol. with exendin-4, inhibited radioligand binding at the same concns. that altered secretion from acini and chief cells. Glucagon, GLP-1 and GLP-2 inhibited 125I-[Y39] exendin-4 binding only at concns. .gtoreq.100 nM. Exendin(9-39)NH2, a specific exendin-receptor antagonist, potently inhibited 125I-[Y39] exendin-4 binding (IC50 = 6.1 and 3.5 nM in acini and chief cells, resp.). In pancreatic acini and gastric chief cells from guinea pig, exendin-3, exendin-4 and tGLP-1 increase cellular cAMP and modulate enzyme secretion by interacting with high-affinity exendin receptors. 125I-[Y39] exendin-4 is a useful radioligand for studying exendin receptors.

130357-25-4, Exendin 3 (Heloderma horridum) RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (cAMP formation and enzyme secretion by pancreas acinus and stomach chief cells response to)

ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1990:608593 HCAPLUS

DOCUMENT NUMBER: 113:208593

TITLE: Purification and structure of exendin-3, a new

pancreatic secretagogue isolated from Heloderma

horridum venom

AUTHOR(S): Eng, John; Andrews, P. C.; Kleinman, Wayne A.;

Singh, Latika; Raufman, Jean Pierre

CORPORATE SOURCE: Solomon A. Berson Res. Lab., Veterans Aff. Med.

Cent., Bronx, NY, 10468, USA

SOURCE: Journal of Biological Chemistry (1990), 265(33),

20259-62

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal LANGUAGE: English

An assay for Hisl peptides performed by amino-terminal amino acid sequencing was used to screen venom from the Gila monster lizard, H. horridum. Two Hisl peptides were identified: helospectin and a new Hisl peptide that has been named exendin-3 to indicate that it is the third peptide to be found in an exocrine secretion of Heloderma lizards which has endocrine activity, the first two being helospectin (exendin-1) and helodermin (exendin-2). In the lot of H. horridum venom tested, exendin-3 was 5-10-fold more abundant in molar concn. than helospectin. The structure of exendin-3 was analyzed by amino acid sequencing and mass spectrometry. Exendin-3 is a 39-amino acid peptide with a mass of 4200. It contains a carboxyl-terminal amide and has a strong homol. with secretin at its amino-terminal 12 amino acids. The complete structure of exendin-3 is: His-Ser-Asp-Gly-Thr-Phe-Thr-Ser-Asp-Leu-Ser-Lys-Gln-Met-Glu-Glu-Glu-Ala-Val-Arg-Leu-Phe-Ile-Glu-Trp-Leu-Lys-Asn-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Pro-Ser. It is 32 and 26% homologous with helospectin and helodermin, resp. It has greatest homol. with glucagon (48%) and human glucagon-like peptide-1 (50%). Exendin-3 (3 .mu.M) stimulated increases in cellular cAMP and amylase release from dispersed guinea pig pancreatic acini.

IT 130357-25-4, Exendin 3 (Heloderma horridum)

RL: PRP (Properties)

(amino acid sequence of)

FILE 'HOME' ENTERED AT 14:27:54 ON 28 MAR 2003

GenCore version 5.1.4_p5_4578

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OM protein - protein search, using sw model

Run on A March 28, 2003, 08:25:12; Search time 74 Seconds (without alignments)
70.227 Million cell updates/sec
Title:
US-09-756-690A-1
Sequence:
1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
Scoring table: BLOSUM62
Scoring table: BLOSUM62
Searched:
908470 seqs, 133250620 residues
Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match, 0%
Maximum Match, 100%
Listing first 45 summaries

A_Geneseq_101002:*

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2. /SIDS2/gcddata/geneseq/geneseqp-embl/AA1981.DAT:*
3. /SIDS2/gcddata/geneseq/geneseqp-embl/AA1981.DAT:*
4. /SIDS2/gcddata/geneseq/geneseqp-embl/AA1982.DAT:*
5. /SIDS2/gcddata/geneseqg/geneseqp-embl/AA1983.DAT:*
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166. /SIDS2/gcddata/geneseqg/geneseqp-embl/AA1993.DAT:*
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187. /SIDS2/gcddata/geneseqg/geneseqp-embl/AA1993.DAT:*
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231. /SIDS2/gcddata/geneseqg/geneseqp-embl/AA2002.DAT:*
231. /SIDS2/gcddata/geneseqg/geneseqp-embl/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	Heloderma horridum Exendin-3, for use Gila monster exend Exendin-3 peptide Amino acid sequenc H. horridum exendi Mexican beaded liz Amino acid sequenc Glucagon-like pept Heloderma horridum
SUMMARIES	AAR80545 AAR805769 AAR47608 AAR71501 AAR3717 AAB11281 AAB52871 AAB52871 AAR94010 AAR09378
80	116 119 22 22 22 22
% Query Match Length DB 1	
% Query Match	100.00 100.00 100.00 100.00 100.00 100.00 100.00
Score	208 208 208 208 208 208 208 208 208
Result No.	10 01

Claim 5; Columns 13-14; 17pp; English.

PS

Exendin-4, for use Gila monster exend Exendin-4 peptide Antho acid sequenc H. suspectum exend exendin agonist pe Extendin-4 peptide Extendin-6 peptide Extendin-7 peptide Extendin-7 peptide Extendin-7 peptide Extendin-8 peptide Gila monster exten Amino acid sequenc Extendin-4 (-39) Glucagon-11ke pept
AMMOLY70 AAY31502 AAY31502 AAY31502 AAB11305 AAB11306 AAB1306 AAB52840 AAB52841 AAB52842 AAB52858 AAB52858 AAB52872 AAB53872 AAB5387
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AAR	RESULT 1 AAR80545
ΩX	AAR80545 standard; peptide; 39 AA.
AC	AAR80545;
XX	
DŢ	27-FEB-1996 (first entry)
XX	
DE	Heloderma horridum exendin-3.
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ΚW	Exendin-3; diabetes mellitus; hyperglycaemia; insulinotropic peptide.
XX	
SO	Heloderma horridum.
XX	
Мď	US5424286-A.
XX	
δ	13-JUN-1995.
X	
PF	24-MAY-1993; 93US-0066480.
XX	
PR	24-MAY-1993; 93US-0066480.
XX	
PA	(ENGJ/) ENG J.
YY	•
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XX	
X X	WPI; 1995-2627/34.
PT	Stimulating/inhibiting insulin release with exendin polypeptide(s)
T.	for treating diabetes mellitus and preventing hyperglycaemia,
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HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                                                                                                  AAW47608 standard; peptide; 39
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AAR80545 is Heloderma horridum exendin-3. It is an insulinotropic peptide, and can therefore be used in the treatment of diabetes mellitus (types I or II), and for the prevention of hyperglycaemia. It normalises hyperglycaemia through glucose-dependent and insulin-(in)dependent mechanisms.
                                                                                                                                                                                                                                                                                                                                                                                                                              Exendin; obesity; type II diabetes; eating disorders; cardiac disease; insulin resistance syndrome; elevated plasma glucose level; agonist.
                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                               Exendin-3, for use in treating disorders related to food intake.
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                                                                                                                              Length 39;
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llarity 100.0%; Pred. No. 9.2e-19;
Conservative 0; Mismatches 0;
                                                                                                                           100.0%; Score 208; DB 16;
1larity 100.0%; Pred. No. 9.2e-19;
Conservative 0; Mismatches 0;
                                                                                                                                                                                      Claims 16, 24; Page 8; 214pp; English
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                                                                                                                                                                                                                                                                                                  AAW61769 standard; peptide; 39
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97US-0055404.
97US-0065442.
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                                                                                                                                          Local Similarity
nes 39; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Heloderma horridum
                                                                                              39 AA;
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08-AUG-1997;
14-NOV-1997;
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                                                                                                                      Query Match
Best Local S1
Matches 39;
                                                                                              Sequence
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ID AAW6
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Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAW47549 describes a generic exendin agonist, provided that it does have the formula of either exendin-3 (AAW47608) or exendin-4
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                                                                                                                                                                                                                                    spasm; postprandial dumping syndrome; postprandial hyperglycaemia; type 1 diabetes; impaired glucose tolerance; toxin ingestion; obesity; Gila monster venom; exendin-3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
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                                                                                                                                                                                                   Exendin agonist; gastric motility; gastric emptying;
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100.0%; Pred. No. 9.2e-19;
tive 0; Mismatches 0;
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                                                                 (first entry)
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Best Local Similarity 100.(
Matches 39; Conservative
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                                                                                                                                     Gila monster exendin-3.
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                                                                                                                                                                                                                                                                                                                                                                          Heloderma horridum.
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(AAW47609).
AAW47608;
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Gaps

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1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39

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Local Similarity nes 39; Conserv

Query Match Best Loc Matches

Length 39;

Exendin; agonist; diabetes; disorder; plasma glucose; gastric; diagnostic; gastro-intestinal; radiological; generic.

Amino acid sequence of exendin-3.

08-JUN-1999

AAY03717;

AAY03717 standard; peptide; 39 AA.

RESULT 5

/note= "C-terminal amide" Location/Qualiflers

Modified-site

Synthetic

W09907404-A1

98WO-US16387 97US-0055404

06-AUG-1998; 08-AUG-1997; (AMYL-) AMYLIN PHARM INC.

Prickett KS;

seeley NRA,

WPI; 1999-180403/15.

AAY3150

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The invention relates to new methods of increasing urine flow that comprises administering an exendin or exendin agonist, or a GLP-1 (glucagon-like peptide) or GLP-1 agonist. The new methods using an exendin, exendin agonist, GLP-1 agonist. The new methods using an increasing urine flow, decreasing potassium concentration in urine, roceasing urine flow, decreasing potassium concentration in urine, preventing or alleviating a disorder associated with toxic hypervolemia (renal failure, congestive heart failure, nephrotic syndrome, pulmonary edema, cirrhosis, or hypertension). They can also be used for inducing rapid diuresis, preparing an individual for surgical procedure, in receasing ranal plasma flow and glomerular filtration rate, treating pre-eclampsia or eclampsia of pregnancy, and increasing a condition/ disorder that can be alleviated by increasing cardiac contractility (congestive heart failure, pulmonary edema, systemic edema or renal failure). Unlike prior art diuretics, the new methods increase urine excretion and sodium excretion without increasing potassium loss, and are called they are a prolonged duration of action, are increase unine and action they are a prolonged duration of action, are increased.
                                                                                                                                                                                                                                                                                                                                                                            Exendin; agonist; GLP-1; glucagon-like peptide; toxic hypervolemia; diuresis; renal plasma flow; glomerular filtration rate; pre-eclampsia; eclampsia of pregnancy; cardiac contractility; renal failure; diuretic; congestive heart failure; nephrotic syndrome; pulmonary edema; cirrhosis; hypertension; urine flow.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Increasing urine flow by administering peptides or peptide agonists
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100.0%; Score 208; DB 20;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 39; Conservative 0; Mismatches 0;
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39
/note= "C-terminal amide"
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                                                                        AAY31501 standard; peptide; 39 AA
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                                                                                                                                                                                                                                                                                                            Exendin-3 peptide sequence
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Heloderma horridum.
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                                                                                                                                                      AAY31501;
RESULT 4
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xaal-xaaz-
xaal-xaad-xaad-xaad-xaad-xaad-xaag-ser-Lyg-Gln-xaag-Glu-Glu-- Glu-Ala-
yaal-xaad-
yal-Arg-Leu-xaalo xaall-xaal2- xaal3-Leu-Lyg-Asn-Gly-Gly Xaal-Ser-Ser-
yal-Arg-Leu-xaalo xaall-xaal2- xaal3-Leu-Lyg-Asn-Gly-Gly Xaal-Ser-Ser-
cly-Ala- xaal3-xaal6- xaad7- xaal8-z; wherein xaal 1s His, Arg or Tyr:
xaa2 is Ser, Gly, Ala, or Thr: xaad is Asp or Glu; xaad is Phe, Tyr, or
napthylalanine; xaa5 is Thr or Ser; xaa6 is Ser or Thr; xaa7 is Asp or
clu; xaa8 is Leu, Ile, Val, pentylglycine, or Met; xaa9 is Leu, Ile,
pentylglycine, Val, or Met; xaal0 is Phe, Tyr, or napthylalanine; xaal6
is Ile, Val, Leu, pentylglycine, tert-butylglycine, or Met; xaal5
or Asp; xaal1 is Trp, Phe, Tyr, or napthylalanine; xaal6
or Asal7 are independently Pro, homoproline, 3Hyp, 4Hyp, thioproline,
n-alkylglycine, N-alkylpentylglycine, or N-alkylalanine; xaal6
or Tyr, or Tyr; and Z is -OH or -NHZ with the proviso that the sequence is
not the amino acid sequences shown in the proviso that above formula where
the amino acid sequences shown in the proviso that above formula where
xaal is His, arg, Tyr or 4-imidazopropionyl. The exendin agonists are
used to treat Type I and II diabetes, disorders which would be benefited
by agents which lower plasma glucose levels, and disorders which would be
benefited by agents useful in delaying and/or slowing gastric emptying.
Conditional control of control control of control of control of control of control control control control of control cont
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to exendin agonists which slow gastric emptying and lower plasma glucose levels. The peptides are of the formula
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps

    useful in the treatment of Type I and II

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 208; DB 20;
Pred. No. 9.2e-19;
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Best Local Similarity 100.0%; Pi
Matches 39; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New exendin agonists
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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8×6×6
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HSDGTFTSDLSKQMEEEAVRLFTEWLKNGGPSSGAPPPS 39

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Length 39; Indels

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The present invention relates to extendins and their agonists which have been modified with molecular weight increasing agents such as polyethylene glycol (PEG). These can be used in the treatment of diabetes, obesity, impaired glucose tolerance, postprandial dumping syndrome, postprandial hyperglycaemia, eating disorders, insulin resistance syndrome, dyslipidaemia and to suppress glucagon secretion.
                                                                                                                                                                                                                               Modified exendin or an exendin agonist linked to one or more polyethylene glycol (PEG) polymers, modulate plasma glucose levels, useful for treating disorders such as diabetes and obesity -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Extendin-3; Gila monster lizard; Mexican Beaded lizard; exen glucagon-like peptide; plasma glucagon; necrolytic erythema; glucagonoma; hyperglucagonemia; diabetes.
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illarity 100.0%; Pred. No. 9.2e-19;
Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY94010 standard; peptide; 39 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Amino acid sequence of extendin-3.
                                                                                                                                                                                                                                                                                                              Example 1; Fig 1; 119pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JAN-1999; 99US-0116380.
30-APR-1999; 99US-0132017.
10-JAN-2000; 2000US-0175365.
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                                                 28-APR-2000; 2000WO-US11814
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                                                                                                                      (AMYL-) AMYLIN PHARM INC
                                                                                                                                                            Young A, Prickett K;
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                                                                                                                                                                                                 WPI; 2000-672834/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 39; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heloderma horridum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39 AA;
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Modified-site
                                                                                     30-APR-1999;
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           09-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Young A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAY94010;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY94010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes a novel formulation (I) comprising an exendin or exendin agonist peptide, a buffer and an iso-osmolality modifier which has a pl of 3-7. The products of the invention have antidiabetic activity. The exendin or exendin agonist is used to increase the sensitivity of a subject to insulin to treat diabetes and disorders which would benefit from agents which lower plasma glucose levels and disorders which would benefit from agents that delay and/or slow gastric emptying or reducing food intake.
                                                                                                                                                                                                                   Exendin; agonist; treatment; antidiabetic; insulin sensitivity; diabetes; plasma glucose; gastric emptying; food intake.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New formulations comprising an exendin or exendin agonist peptide used for increasing the sensitivity of a subject to insulin to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 208; DB 21;
100.0%; Pred. No. 9.2e-19;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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                                                                                                                                                                                    H. Morridum exendin 3 peptide SEQ ID NO 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mexican beaded lizard extendin-3 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kolterman O;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Figure 1; 281pp; English.
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                                                                         AAB11281 standard; Peptide; 39 AA.
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                                                                                                                                                                                                                                                                                                                                                                                         10-JAN-2000; 2000US-0116380.
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Best Local Similarity 100.0
Matches 39; Conservative
                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AMYL-) AMYLIN PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Young A, L'Italien JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-514584/46.
                                                                                                                                                                                                                                                                             Heloderma horridum
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                                                                                                                                                                                                                                                                                                                  WO200041546-A2.
                                                                                                                                        20-FEB-2001
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                                                                                                            AAB11281;
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Glucagon-like peptide-1 (GLP-1) homologue, exendin 3.
                                                                                                                                                 / Match 100.0%; Score 208; DB 21; Local Similarity 100.0%; Pred. No. 9.2e-19; nes 39; Conservative 0; Mismatches 0;
                                                                                                                                                                            1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                                                                                                                                                                                     1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 13; 43pp; English.
                                                                                                                                                                                                                              AAU07378 standard; peptide; 39 AA
                                 Example 1; Fig 1; 96pp; English
                                                                                                                                                                                                                                                                                                                                                                           14-MAR-2000; 2000US-189091P.
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                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                        (GOEK/) GOEKE B.
(SCHI/) SCHIRRA J.
                                                                                                                                      39 AA;
                                                                                                                                                                                                                                                                                                                                   WO200168112-A2.
                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                         18-DEC-2001
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                                                                                                                                      Sequence
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Matches
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procedures or to treat or prevent non-infectious acute and chronic diarrhoea, post-live dumpling syndrome, irritable bowel syndrome or symptoms associated with narcotics withdrawal. Unlike prior art treatment with glucagon, the invention is not contraindicated in persons with adiabetes, does not incur the risks of side effects such as nauses, and is not expensive. The present sequence represents mammalian glucagon-like peptide-1, (GLP-1) homologue, exendin 3 as described in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Exendin-3; antilipemic; cardiant; triglyceride; inotropic; diuretic;
coronary heart disease; dyslipidaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The patent discloses a method for modulating plasma or postprandial triglyceride and other lipid levels by administering exendin or an exendin agonist. Exendins have inotropic and diuretic effects. They suppress the secretion of glucagon. Exendin and its agonists have a significant effect on the reduction of blood serum triglyceride concentrations. They are used to treat coronary heart disease and dyslipidaemia, and for modifying postprandial triglyceride levels. The present sequence is exendin-3 peptide from Heloderma horridum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Use of exendin and exendin agonist compounds for modulating triglyceride levels, and treating heart disease and dyslipidemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 39;
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100.0%; Pred. No. 9.2e-19;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 39; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                 1 HSDGTFTSDLSKOMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Heloderma horridum exendin-3 peptide.
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nes 39; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kolterman OG, Young
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-514422/56.
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Modified-site
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                                                                                                                                                                       invention.
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inhibiting antro-duodenal motility, useful to prevent or treat gastrointestinal disorders such as irritable bowel syndrome and non-infectious diarrhoea, comprises administering glucagon-like peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a method of inhibiting antro-duodenal motility in a patient, comprising administering a glucagon-like peptide (GLP-1) molecule. The method is used to premedicate or in endoscopic
                              Lowering plasma glucagon using exendin, an exendin agonist, a modified exendin or a modified exendin agonist, useful for treating hyperglucagonemia and diabetes
                                                                                                                                                                  The present sequence represents an extendin-3 peptide. Extendins are found in the salivary glands of the Gila monster and Mexican Beaded lizard, and have sequence similarity to glucagon-like peptides. It is useful in the method of the invention. The specification describes a method for lowering plasma glucagon, comprising administering an exendin agonist, a modified exendin or a modified exendin agonist. These compounds lower plasma glucagon level. The method is suffering from necrolytic erythema or glucagon level, preferably humans, suffering from necrolytic erythema or glucagonoma. The method is also useful for treating hyperglucagonemia and other conditions that would benefit from reduced glucagon levels and/or suppression of glucagon, e.g. type 1 and type 2 dlabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antidiarrhoeic, antiinflammatory; antiaddictive; premedication; antro-duodenal motility; glucagon-like peptide-1; GLP-1; endoscopy; diarrhoea; post-operative dumping syndrome; irritable bowel syndrome; narootics withdrawal; exendin 3.
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(first entry)

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Exendin 3; Gila monster venom; GLP-1 analogue; glucagon-like peptide-1; type II diabetees; non-insulin dependent diabetes mellitus; NIDDM; beta-cell function; secretory capacity; impaired glucose tolerance; IGT; beta-cell stimulatory test; diagnostic test; insulinotropic.
                                                                                                                                                  Gila monster venom GLP-1 analogue, exendin 3.
                                 AAB60252 standard; peptide; 39
                                                                                                                                                                                                                                                                                                                                                                                                     14-JUN-2000; 2000WO-US16428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BION-) BIONEBRASKA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Holst JJ, Vilsboll T;
                                                                                                                                                                                                                                                                                           Heloderma suspectum.
                                                                                                                                                                                                                                                                                                                               WO200077039-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUN-1999;
                                                                                                           28-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                   21-DEC-2000.
                                                                            AAB60252;
RESULT 12
                AB60252
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succhimindyl and mateimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide components to form a peptidase stabilised therapeutic peptide components to form a peptidase stabilised therapeutic peptide components to form a peptidase stabilised therapeutic peptides e.g. hormones, growth (I) are useful for modifying therapeutic peptides e.g. hormones, growth in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not sultable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half infe) and specificity as bonding to large molecules decreases intracellular uptake and interference with physiological processes. AAB90829 to AAB92441 represent invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity
                                                                                                                                                                                                                                                                                         Protection, endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thibaudeau K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 100.0%; Score 208; DB 22; Local Similarity 100.0%; Pred. No. 9.2e-19; les 39; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                       Pancreatic hormone glucagon peptide SEQ ID NO:364
  DĽ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Holmes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 315; 733pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Milner PG,
                                                                                                                                         AABB1190 standard; Peptide; 39 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0134406.
99US-0153406.
99US-0159783.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAY-2000; 2000WO-US13576
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CONJ-) CONJUCHEM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-112059/12.
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                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200069900-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-NOV-2000.
                                                                                                                                                                                                                   22-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
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                                                                                                                                                                           AA#91190;
                                                                                                       RESULT 11
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99US-0333415

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The invention relates to a new method for evaluating beta-cell secretory capacity in an individual, or responsiveness of a beta-cell to glucose, comparising the administration of glucose and glucagon-like peptide-1 (GLD-1) or its biologically active analogues. The response in the individual is then measured against the standard response in the individual to determine if the individual has impaired beta-cell function. The method is mestil for detecting impaired beta-cell function. The method is particularly useful for diagnosing impaired of glucose tolerance (IGT) and non-insulin-dependent (type II) diabetes. The method is a rapid test of beta-cell function, which is a marker for impaired glucose tolerance. Onlike prior methods, the method is reliable and without significant adverse side effects and/or patient pain and discomfort. The method also provides information about insulin secretory capacity, and is easy and reproducible. The present sequence represents a gila monster venom GLP-1 analogue peptide referred to in the disclosure
                                                   Evaluating beta-cell secretory capacity and responsiveness to glucose, useful for diagnosing impaired glucose tolerance and diabetes, comprises employing glucagon-like-peptide-1 as a diagnostic test to determine beta-cell function -
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Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 39; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 13; 42pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB64181 standard; peptide; 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
WPI; 2001-102518/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39 AA;
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AAB64181
ID AAB64
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AC AAB64
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The invention relates to the use of an exendin (AAB64181-B64182) or an exendin agonist (AAB64185-B64368) for treating gestational diabetes on exendin agonist (AAB64185-B64368) for treating gestational diabetes mellitus (GDM) in a patient. GDM arises during pregnancy, and is due to a combination of increased insulin resistance and a diminished ability to increase insulin resistance and insulin secretion increase. GDM pregnancy, both insulin resistance and insulin secretion increase. GDM pregnancies are associated with complications in both the mother and the pregnancies are associated with complications in both the mother and the infections. GDM results in an elevated rates of Caesarian delivery. Infections. GDM results in an elevated rate of feetal abnormalities such as neural tube defects, and is associated with an increased risk of caecatal morbidities such as hypoglycaemia, hypocalcaemia, and subsequent chlidhood and adolescent obesity. Exendins are peptides from the salivary secretions of the Glam monster (exendin-4) and the Mexican beaded lizard (exendin-3) which exhibit homology with several members of the glucagon-like peptide family, particularly GLP-1, and have similar causent in the newborn. They have a potent and prolonged effect on hypoglycaemia in the newborn. They have a potent and prolonged effect on chypoglycaemia in the newborn. They have a potent and prolonged effect on hypoglycaemia in the newborn. They have a potent and prolonged effect on blood glucase, and, unlike conventional insulin therapy, should not cause weight gain, as they inhibit gastric emptying and reduce appetite. The presents exendin-3 from the Mexican beaded lizard which is enemity of insuling in the member of the mach 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of exendins or exendin agonists for lowering or reducing blood glucose levels and treating gestational diabetes mellitus in a subject, especially in a human
                                                                 Exendin-3; gestational diabetes mellitus; GDM; insulin resistance;
pregnancy complication; neonatal abnormality; blood glucose modulator;
insulinotropic; anorectic; Mexican beaded lizard.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 39;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  which is specifically claimed for use in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 39; Conservative 0; Mismatches 0;
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                      Mexican beaded lizard exendin-3, SEQ ID NO:1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; Page 10-11; 133pp; English.
                                                                                                                                                                                                                                                                                                                                               23-MAY-2000; 2000WO-US14231.
                                                                                                                                                                                                                                                                                                                                                                                                99US-0323867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AMYL-) AMYLIN PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hiles R, Prickett KS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-137634/14.
                                                                                                                                                                                   Heloderma horridum.
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                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1999;
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the invention relates to modified insulinotropic peptides (ITP9), or derivatives thereof which comprise a reactive group which reacts with amino groups, hydroxyl groups or thiol groups build of components (e.g., serum albumin) to form a stable covalent bond. The insulinotropic peptides of the invention are derivatives of glucagon-like peptide 1 (GLP-1) or exendin and contain a reactive group such as a malamido group or a succinimidyl group. The peptides of the invention act by stimulating the synthesis or expression of insulin. A composition comprising a peptide of the invention is useful A composition as setting a peptide of the invention is useful in succinimity type II (maturity onset) diabetes. It is also useful as a setting a peptide of the invention is useful in treatment of nervous system disorders including anxiety, psychosis, seizures, panic attacks, hysteria and sleep anxiety, psychosis, seizures, panic attacks, hysteria and sleep care activate the CNS for the treatment of disorders such as (CNS); to activate the CNS for the treatment of disorders such as clustery. The conjugation of a peptide of the invention to a lood component via the reactive group provides increased stability in the presence of peptidases. The peptides of the invention therefore have a longer in vivo. Half-life as they are less susceptible to insulinotropic peptide of the invention.
                                             Insulinotropic peptide; insulin production; GLP-1 derivative; glucagon-like peptide 1; exendin derivative; reactive group; peptidase stabilisation; blood protein; conjugation; type II diabetes; insulin resistance; nervous system disorder; sedative; anxiolytic; antidiabetic; neuroprotective; tranquilliser; anticonvulsant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel modified insulinotropic peptides for treating diabetes, nervous system disorders and for post surgery treatment, has reactive groups which react with amino, hydroxy or thiol groups on blood components
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 100.0%; Score 208; DB 22; Similarity 100.0%; Pred. No. 9.2e-19; 39; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                     L'Archeveque B, Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 88-89; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB36419 standard; peptide; 39
                                                                                                                                                                                                                                                                                  17-MAY-2000; 2000WO-US13563.
                                                                                                                                                                                                                                                                                                                       99US-0134406.
99US-0159783.
              Exendin-3, SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                 (CONJ-) CONJUCHEM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-025008/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              39 AA;
                                                                                                                                                                                                           WO200069911-A1.
                                                                                                                                                                                                                                                                                                                           17-MAY-1999;
                                                                                                                                                                    Unidentified.
                                                                                                                                                                                                                                                                                                                                          15-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                              St Pierre S;
                                                                                                                                                                                                                                            23-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                         Bridon DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sednence
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Matches 39
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AAB48800 standard; peptide; 39

RESULT 14 AAB48800

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09-MAR-2001

AAB48800;

us-09-756-690a-1.rag

28-FEB-2001 (first entry)

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Glucagon-like peptide-1; GLP-1; GLP-2; vasotropic; cerebroprotective; brain tissue injury; reperfusion; blood flow; ischaemia; acute stroke; metabolic intervention; haemorrhage; tissue damage; medical procedure; surgical; insulin; hyperglycaemia; hypoglycaemia; brain anabolism;
                                                                                                                                                                                                                                                       A method for amelioration of brain tissue injury comprises administering a composition including a compound which binds to receptor for glucagon-like peptide-1
              Gila monster venom exendin 3 peptide SEQ ID NO:7.
                                                                                                                                                                    01-MAY-2000; 2000WO-US11652.
                                                                                                                                                                                                                        Coolidge TR, Ehlers MRW;
                                                                                                                                                                                                        (BION-) BIONEBRASKA INC.
                                                                                    Heloderma suspectum.
                                                                                                                                                                                                                                          WPI; 2001-015911/02.
                                                                                                                                     WO200066142-A2
                                                                                                     Key
Modified-site
                                                                                                                                                                                       30-APR-1999;
                                                                  eudlycaemta.
                                                                                                                                                     09-NOV-2000
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99US-0303016

Location/Qualifiers 39

/note= "amidated"

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The present invention describes a method for the amelioration of brain tissue injury caused by reperfusion of blood flow comprising administering a composition including a compound which binds to a mainistering a composition including a compound which binds to a ceceptor for glucagon-like peptide-1 (GLP-1), in a pharmaceutical carrier. The method is used for amelioration of brain tissue injury caused by reperfusion of blood flow following a period of ischaemia. CG GLP-1 is used for metabolic intervention to improve the function of ischaemic and reperfused brain cells. It treats patients after an acute stroke or haemorinage and tissue damage arising from a medical procedure involving a reperfusion event. GLP-1 is an ideal alternative procedure involving a reperfusion event. GLP-1 is an ideal alternative consulin for the treatment of stroke as it stimulates endogenous to insulin for the treatment of stroke as it stimulates endogenous to insulin for the treatment optimises insulin secretion, increases by an ambolism, enhancing insulin effectiveness by suppressing glucagon and maintains euglypoaemia or mild hypoglycaemia with no risk of severe hypoglycaemia. The present sequence represents a Glia monster venom ceptide which is homologous to GLP-1, and is glven in the present invention.
Disclosure; Page 8; 19pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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Gaps ö Length 39; Indels 100.0%; Score 20%; DB 22; 100.0%; Pred. No. 9.2e-19; ative 0; Mismatches 0; Query Match Best Local Similarity 100. Matches 39; Conservative

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Search completed: March 28, 2003, 08:37:20 Job time : 75 secs

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1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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CITY: Chicago
STATE: Illinois
COUNTRY: USA
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RESULT 1
US-08-066-480-1
Sequence 12, Appl
Sequence 9, Appl 1
Sequence 9, Appl 1
Sequence 18, Appl
Sequence 31, Appl 1
Sequence 5, Appl 1
Sequence 8, Appl 1
Sequence 8, Appl 1
Sequence 8, Appl 1
Sequence 8, Appl 1
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Sequence 7, Appl
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                                                                                                                                                                                                                     March 28, 2003, 08:36:08; Search time 28 Seconds (without alignments) 40.982 Million cell updates/sec
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Sequence 33, 1
Sequence 34, 1
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208
1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6A_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
                                 GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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US-09-302-596-7

US-09-333-415-7

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US-09-623-618B-19

US-09-623-618B-34

US-09-623-618B-34

US-09-623-618B-34

US-09-623-618B-12

US-09-302-596-9

US-09-302-596-9

US-09-623-618B-12

US-09-623-618B-12

US-09-623-618B-18

US-09-623-618B-31

US-09-623-618B-31

US-09-623-618B-31

US-09-623-618B-31

US-09-623-618B-31

US-09-333-415-8

US-09-333-415-8

US-09-333-415-8

US-09-623-618B-24

US-09-333-415-8

US-09-623-618B-24

US-09-333-415-8

US-09-623-618B-24

US-09-623-618B-24
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Sequence 1, Application US/08066480
Patent No. 542426
GENERAL INFORMATION:
APPLICANT: Eng, John
TITLE OF INVENTION: Pharmaceutical Compositions And Use of
TITLE OF INVENTION: Exendin-3 and Exendin-4 for Treatment of Diabetes Mellitus
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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Sequence 5
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Sequence 4
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ZIP: 60606
COMPUTER READABLE FORM:
MEDTUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/066,480
FILING DATE: US/08/066,480
CLASSIFICATION NUMBER: US/08/066,480
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/OCKET NUMBER: 26,949
REFERRORE/DOCKET NUMBER: 26,949
REPERRORE/DOCKET NUMBER: 33,084
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
100.0%; Score 20%; DB 1;
Best Local Similarity 100.0%; Pred. No. 7.1e-20;
Matches 39; Conservative 0; Mismatches 0;
US-09-623-618B-13

US-09-623-618B-20

US-09-623-618B-21

US-08-623-618B-21

US-08-623-618B-21

US-08-623-618B-21

US-08-623-618B-21

US-09-209-799D-14

US-09-208-750-1

US-09-258-750-4

US-09-258-750-4

US-09-258-750-8

US-09-288-750-1

US-09-288-711-1

US-09-289-111-1

US-09-398-111-1

US-09-398-111-1

US-09-398-111-1

US-09-398-111-1

US-09-398-111-4

US-09-398-111-4

US-09-398-111-4

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US-09-398-111-8
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OTHER INFORMATION: /label= Exendin-3
US-08-066-480-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Allegretti & Witcoff, Ltd. STREET: 10 S. Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 312-715-1234
INFORMATION FOR EST ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acids
TYPE: amino acid
STRANDEDNESS: single
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1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39

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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: COOLIGGE, Thomas R.
APPLICANT: Eblers, Mario R.W.
TITLE OF INVENTION: Metabolic Intervention with GLP-1 or its Biologically TITLE OF INVENTION: Active Analogues to Improve the Function of the TITLE OF INVENTION: Active Analogues to Improve the Function of the TITLE OF INVENTION: Ischemic and Reperfused Brain
FILE REFERENCE: P03660US2
CURRENT FILING DATE: 1999-04-30
CURRENT PILING DATE: 1999-04-30
PRIOR APPLICATION NUMBER: 60,103,498
PROR FILING DATE: 1998-10-08
SOFTWARE: Patentin Ver. 2.0
SEQID NO S: 13
                                                                                                                                                                                  APPLICANT: Holst, Jens J.
APPLICANT: Holst, Jens J.
APPLICANT: Holst, Tina
TITLE OF INVENTION: GLP-1 as a Diagnostic Test to Determine Beta-Cell
TITLE OF INVENTION: Function and the Presence of the Condition of IGT and
TITLE OF INVENTION: Type II Diabetes
FILE REPERENCE: P039870S0
CURRENT APPLICATION NUMBER: US/09/333,415
CURRENT APPLICATION NUMBER: 1999-06-15
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
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Best Local Similarity 100.0%; Pred. No. 7.1e-20;
Matches 39; Conservative 0; Mismatches 0;
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100.0%; Pred. No. 7.1e-20;
Live 0; Mismatches 0;
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Patent No. 6429197
                                                                                                                  Sequence 7, Application US/09333415 Patent No. 6344180
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; ORGANISM: Heloderma suspectum
US-09-333-415-7
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APPLICANT: L'Archeveque, Ben
APPLICANT: Ezrin, Alan M.
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Best Local Similarity 100.0
Matches 39; Conservative
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US-09-623-618B-19
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US-09-303-016-7
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APPLIGANT: COOLIGGE, Thomas R.
APPLIGANT: COOLIGGE, Thomas R.
APPLIGANT: Enhers, Wario R.W.
'ITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of TITLE OF INVENTION: Ischemic and Reperfused Tissue
FILE REFRENCE: P03660013
CURRENT APPLICATION NUMBER: US/09/302,596
CURRENT FILING DATE: 1999-04-30
PRIOR APPLICATION NUMBER: 60,103,498
PRIOR APPLICATION NUMBER: 60,103,498
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
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100.0%; Score 208; DB 4; Length 39;
Best Local Similarity 100.0%; Pred. No. 7.1e-20;
Matches 39; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 39;
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APPLICANT: L'Archeveque, Benoit
APPLICANT: Ezin, Alan M.
APPLICANT: Leblanc, Anouk
APPLICANT: Long LASTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 500802001620
CURRENT APPLICATION NUMBER: US/09/623,618B
CURRENT FILING DATE: 2000-09-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%; Score 20%; DB 4; Best Local Similarity 100.0%; Pred. No. 7.1e-20; Matches 39; Conservative 0; Mismatches 0;
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| HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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PRIOR APPLICATION NUMBER: PCT/USOO/13563
PRIOR FILING DATE: 2000-05-17
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR PLING DATE: 1999-10-15
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 11
LENGTH: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 11, Application US/09623618B
Patent No. 6329336
                                                                                                                                                        Sequence 7, Application US/09302596 Patent 40. 6284725 GENERAL INFORMATION:
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US-09-302-596-7
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Length 39;

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Sequence 2, Application US/08066480
Sequence 2, Application US/08066480
Patent No. 542426
GENERAL INFORMATION:
APPLICANT: Eng, John
TITLE OF INVENTION: Pharmaceutical Compositions And Use of
TITLE OF INVENTION: Exendin-3 and Exendin-4 for Treatment of Diabetes Mellitu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide NAMEKEY: MOD_RES LOCATION: 33 LOCATION: 33 CHER INFORMATION: Xaa represents Lys(E-AEEA-AEEA-MPA)-NH2-5TFA and where "E" US-09-623-618B-34
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APPLICANT: Bridon, Dominique P.
APPLICANT: L'Archeveque, Benoît
APPLICANT: L'Archeveque, Benoît
APPLICANT: LEZIN, Alan M.
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: LONGEROUGE
TILE REPRENCE: 500862001620
CURRENT APPLICATION NUMBER: US/09/623,618B
CURRENT APPLICATION NUMBER: PCT/US00/13563
PRIOR FILING DATE: 2000-05-17
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOUTHARE: ExatSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 20%; DB 4;
100.0%; Pred. No. 7.4e-20;
tive 0; Mismatches 0;
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CORRESPONDENCE ADDRESS:
ADDRESSSEE: Allegretti & Witcoff, Ltd.
STREET: 10 S. Wacker Drive
CITY: Chicago
STATE: 1111nois
COUNTRY: USA
ZIP: 60606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/066,480
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPENTING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                 Sequence 34, Application US/09623618B Patent No. 6329336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
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Best Local Similarity 100.0
Matches 39; Conservative
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                                                                                                                                      RESULT 8
US-09-623-618B-34
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LENGTH: 40
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US-09-623-618B-33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide US-09-623-618B-19
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Squence 33, Application US/09623618B

Patent No. 6329336

GENERAL INFORMATION:
APPLICANT: Bridon, Dominique P.
APPLICANT: Erin, Alan M.
APPLICANT: Erin, Alan M.
APPLICANT: Erin, Alan M.
APPLICANT: Conserved to the conserved
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 40
APPLICANT: Holmes, Darren L.
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 500062001620
CURRENT PILING DATE: 12000-09-05
PRIGR APPLICATION NUMBER: PCT/US00/13563
PRIGR APPLICATION NUMBER: 60/13563
PRIGR APPLICATION NUMBER: 60/1367
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 40
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Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 39; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 39; Conservative 0; Mismatches 0;
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ORGANISM: Artificial Sequence
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GENERAL INFORMATION:

SERVERAL INFORMATION:

APPLICANT: COOLIDGE, Thomas R.

APPLICANT: Enhers, Mario R.W.

TITLE OF INVENTION: Metabolic Intervention with GLP-1 or its Biologically TITLE OF INVENTION: Active Analogues to Improve the Function of the TITLE OF INVENTION: Active Analogues to Improve the Function of the TITLE OF INVENTION: Schemic and Reperfused Brain FILE REFERENCE: P03660US2

CURRENT APPLICATION NUMBER: US/09/303,016

PRIOR APPLICATION NUMBER: 60/103,498

PRIOR FILING DATE: 1998-10-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Paren No. 1991-108.

APPLICANT: Holst, Jens J.

APPLICANT: Vilsboll, Tha APPLICANT: Vilsboll, Tha TITLE OF INVENTION: GLP-1 as a Diagnostic Test to Determine Beta-Cell TITLE OF INVENTION: GLP-1 as a Diagnostic Test to Determine Beta-Cell TITLE OF INVENTION: Function and the Presence of the Condition of IGT and TITLE OF INVENTION: Type-II Diabetes

TITLE OF INVENTION: Type-II Diabetes
FILE REFERENCE: P03987USO

CURRENT APPLICATION NUMBER: US/09/333,415

CURRENT FILING DATE: 1999-06-15

NUMBER OF SEO ID NOS:: 13
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Pred. No. 7.4e-19;
1; Mismatches 1; Indels
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Best Local Similarity 94.9%; Pred. No. 7.4e-19;
Matches 37; Conservative 1; Mismatches 1
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PRIOR FILLING DATE: 2000-05-17
PRIOR FILLING DATE: 1999-10-15
PRIOR FILLING DATE: 1999-10-15
PRIOR FILLING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 39
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US-00-303-016-9
Sequence 9, Application US/09303016
; Patent No. 6429197
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Patent No. 6344180
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Best Local Similarity 94.9%;
Matches 37; Conservative
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SEQ ID NO 9
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Patent No. 6284725
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: COLIGGO, Thomas R.
APPLICANT: Ehlers, Mario R.W.
TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of TITLE OF INVENTION: Ischemic and Reperfused Tissue
FILE REFERENCE: P03660US1
CURRENT FILING DATE: 1999-04-30
PRIOR APPLICATION NUMBER: 60/103,498
PRIOR FILING DATE: 1998-10-08
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
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APPLICANT: Leblanc, Anouk
APPLICANT: St. Pierre, Serge
ITILE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 500862001620
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                                                                                                                                                                                                                                                                                                                                                                ; NAME/KEY: Peptide
; LOCATION: 1..39
; OTHER INFORMATION: /label= Exendin-4
US-08-066-480-2
                   NAME: McDonnell, John J
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,084
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-715-1000
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 12, Application US/09623618B Patent No. 6329336
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APPLICANT: Bridon, Dominique P.
APPLICANT: L'Archeveque, Benoit
APPLICANT: Ezrin, AAlan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
, ORGANISM: Gila Monster venom
US-09-302-596-9
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: peptide
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Gaps ö

s; Score 200; DB 4; Length 40;
 pred. No. 7.6e-19;
 h; Mismatches 1; Indels

96.2%; 94.9%;

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OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide NAME/KEY: MOD_RES LOCATION: 40 CATION: 4
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PRIOR APPLICATION NUMBER: PCT/US00/13563
PRIOR FILING DATE: 2000-05-17
PRIOR FLING DATE: 1999-10-15
PRIOR FLING DATE: 1999-10-15
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/134,406
NUMBER OF SEQ ID NOS: 35
SOFWARE: FastSEQ for Windows Version 4.0
ENGTH: 40
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ORGANISM: Artificial Sequence
FEATURE:
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Best Local Similarity 94.9%
Matches 37; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
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Patent No. 6329336

GENERAL INFORMATION:

APPLICANT: Bridon, Dominique P.

APPLICANT: Bridon, Dominique P.

APPLICANT: Bridon, Dominique P.

APPLICANT: LACIA-Veque, Benoit

APPLICANT: LOW LAGATING INSULINOTROPIC PEPTIDES

FILE OF INVENTION: LONG LAGATING INSULINOTROPIC PEPTIDES

FILE OF INVENTION LOWBER: US/09/623,618B

CURRENT FILING DATE: 2000-09-05

CURRENT FILING DATE: 2000-09-05

PRIOR FILING DATE: 1999-10-15

PRIOR FILING DATE: 1999-10-15

PRIOR PLICATION NUMBER: 60/134,406

PRIOR FILING DATE: 1999-05-17

PRIOR APPLICATION NUMBER: 60/134,406

PRIOR PLICATION NUMBER: 60/134,406

PRIOR PLICATION NUMBER: 60/134,406

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PRIOR APPLICATION NUMBER: 60/134,406

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Patent No. 6329336

GENERAL INFORMATION:
APPLICANT: Bridon, Dominique P.
APPLICANT: L'Archeveque, Benoit
APPLICANT: Ezrin, Alan M.
APPLICANT: Bolmes, Darren L.
APPLICANT: APPLICANT: St. Plerre, Serge
TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 500862001620
CURRENT APPLICATION NUMBER: US/09/623,618B

CURRENT FILING DATE: 2000-09-05
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Pred. No. 7.4e-19;
1; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                              96.2%;
illarity 94.9%;
Conservative
                                                                                                                                                                                                                                                                                    ) ORGANISM: Heloderma suspectum
US-09-303-016-9
                                     NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 37; Conserva
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US-09-623-618B-31
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US-09-623-618B-18
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March 28, 2003, 08:37:28.; Search time 14 Seconds (without alignments) 163.587 Million cell updates/sec
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1: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/VESO8_NEW_PUB.pep:*
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7: /cgn2_6/ptodata/1/pubpaa/NEO7_PUBCOMB.pep:*
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13: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
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208
1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSŠGAPPPS 39
GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             237916 seqs, 58723674 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                        OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 9, Appl1 Sequence 18, Appl Sequence 11, Appl Sequence 21, Appl Sequence 22, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 10, Appl Sequence 20, Appl Sequence 20, Appl Sequence 21, Appl Sequence 21, Appl Sequence 21, Appl Sequence 11, Appl Sequence 12, Appl Sequence 13, Appl Sequence 13, Appl Sequence 16, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl	Sequence 12, App.	EREOF FOR MODULATION OF ENT OF DYSLIPIDEMIA ;	Length 39; Indels 0; Gaps 0;	
39 10 US-09-988-978-9 39 10 US-09-9876-388-9 40 10 US-09-876-388-31 40 10 US-09-876-388-31 40 10 US-09-876-388-31 39 9 US-09-756-690A-18 39 9 US-09-756-690A-18 39 9 US-09-756-690A-18 39 10 US-09-003-869-18 39 10 US-09-003-869-18 39 10 US-09-003-869-18 39 10 US-09-003-869-19 39 10 US-09-756-690A-19 39 10 US-09-756-690A-20	2	RESULT 1 US-09-756-690A-1 Sequence 1, Application US/09756690A Sequence 1, Application US/09756690A Sequence 1, Application US/0905604A1 GENERAL INFORMATION: APPLICANT: WOUNCANDERWAA. TITLE OF INVENTION: TRIGINCERIDE LEVELS AND TREATMENT OF DYSLIF TITLE OF INVENTION: TRIGINCERIDE LEVELS AND TREATMENT OF DYSLIF TITLE OF INVENTION: TRIGINCERIDE LEVELS AND TREATMENT OF DYSLIF CURRENT APPLICATION NUMBER: US/09/756,690A CURRENT FILING DATE: 2000-01-10 NUMBER OF SEQ ID NOS: 188 SOFTWARE: PATENTION OF 2.1 SEQ ID NO 1 SEQ ID NO 1 SEQ ID NO 2: 1 SEQ ID NO 2: 1 SEQ ID NO 3: 188 COTHER INFORMATION: Exendin-3 FEATURE: OTHER INFORMATION: Exendin-3 FEATURE: OTHER INFORMATION: C-term amidation US-09-756-690A-1	tch 100.0%; Score 208; DB 9; 39; Conservative 0; Mismatches 0; S9; Conservative 0; Mismatches 0; HSDGTFTSDLSKQMEBEAVRLFIEWIKNGGPSSGAPPPS 39	tion US/09876388 9153Al Dominique P. veque, Benoit
20 21 22 23 24 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20	194 93.3	RESULT 1 'S-09-756-690A-1 'Sequence 1, Application 'Sequence 1, Application 'GENERAL INFORMATION: APPLICANT: YOUNG, ANDR TITLE OF INVENTION: TR TITLE OF INVENTION: TR TITLE OF INVENTION: TR TITLE OF INVENTION: TR TITLE OF INVENTION: UNB FILE REFRENCE: 249/124 CURRENT FILING DATE: 209/124 CURRENT FILING DATE: 200/124 CURRENT FILING DATE: 200/124 CONTERNING HELOGETMA HO FEATURE: COTHER INFORMATION: EXE	Query Match Best Local Similarity Matches 39; Conservat QY 1 HSDGTPTSDLSKQMEE Db 1 HSDGTPTSDLSKQMEE	RESULT 2 US-09-876-388-11 Sequence 11, Application US/09876; Patent No. US20020049153A1 GENERAL INFORMATION: APPLICANT: Bridon, Dominique P. APPLICANT: L'Archeveque, Benoit

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APPLICANT: COOLIDGE, THOMAS R.
APPLICANT: COOLIDGE, THOMAS R.
APPLICANT: EHLERS, MARIO
TILLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILLE REFERENCE: 089187/0395
CURRENT FILLNG DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 60/205,239
PRIOR PILLING DATE: 2000-05-19
                   TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
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Patent No. US20020137666A1

GENERAL INFORMATION:

APPLICANT: BEELEY, NIGEL ROBERT ARNOLD

APPLICANT: BELLEY, NIGEL ROBERT ARNOLD

TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF FOR

TITLE OF INVENTION: USE OF EXENDINS AND AGONISTS THEREOF

FILE REFERENCE: 231/181

CURRENT APPLICATION NUMBER: US/09/003,869A

CURRENT FILING DATE: 1998-01-07

EARLIER APPLICATION UNBER: US 60/034,905

EARLIER FILING DATE: 1997-01-07
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                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Description of Unknown Organism: Exendrin US-09-805-507-7
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Pred. No. 1.4e-19;
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Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0;
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APPLICANT: EHLERS, MARIO
1171LE OF INVENTION TREATMENT OF ACUTE CORON
1171LE OF INVENTION TREATMENT OF ACUTE CORON
1171LE REPERBUCE: 089187/0395
1171LE REPERBUCE: 089187/0395
1171LING DATE: 2001-03-14
1171LING DATE: 2001-05-18
1171LING DATE: 2011-05-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-859-804-7; Sequence 7, Application US/09859804; Sequence No. US/0020107206Al patent No. US/0020107206Al psykral INFORMATION:
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Best Local Similarity 100.0%;
Matches 39; Conservative 0
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                                                                                                                                                                                                                                                                                                       ORGANISM: Unknown Organism
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SOFTWARE: Patentin Ver. SEQ ID NO 7
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US-09-003-869-1
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Sequence 7, Application US/09851738

Partent No. US20020055460A1

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Coolidge, Thomas R.
APPLICANT: Enlers, Mario R.W.
TITLE OF INVENTION: Ischemic and Reperfused Tissue
FILE REPERENCE: P03660US1

CURRENT APPLICATION NUMBER: US/09/851,738

CURRENT FILING DATE: 201-05-09

PRIOR PILING DATE: 1999-04-30
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                                                         APPLICANT: Leblanc, Anouk
APPLICANT: Leblanc, Anouk
APPLICANT: St. Plerre, Serge
APPLICANT: St. Plerre, Serge
APPLICANTON: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REPERENCE: 500862001610
CURRENT APPLICATION NUMBER: US/09/976,386
CURRENT: FILING DATE: 2001-09-24
PRIOR PRIOR PILING DATE: 2000-09-05
PRIOR PLILING DATE: 2000-09-17
PRIOR FILING DATE: 1999-10-15
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100.0%; Score 208; DB 10;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 20%; DB 10;
100.0%; Pred. No. 1.4e-19;
tive 0; Mismatches 0;
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; Patent No. US20020098195A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Gila Monster venom
US-09-851-738-7
             Ezrin, Alan M.
Holmes, Darren L.
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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 11
LENGTH: 39
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Best Local Similarity
Matches 39; Conserv
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Gaps
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                                                                                                                                                                                                                                                        Length 39;
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APPLICANT: Bridon, Dominique P.
APPLICANT: L'Archeveque, Benoit
APPLICANT: Holmes, Darren L.
APPLICANT: Holmes, Darren L.
APPLICANT: LEBIANC, Anouk
APPLICANT: LONG LASTING INSULINOTROPIC PEPTIDES
TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
TITLE REFERENCE: 500862001610;
CURRENT APPLICATION NUMBER: US/09/876,388
CURRENT APPLICATION NUMBER: 09/623,618
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 1090-09-05
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
SOFTWARE IP PROFILE NOW NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 35
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100.0%; Score 208; DB 10;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 39; Conservative 0; Mismatches 0;
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ilarity 100.0%; Pred. No. 1.5e-19;
Conservative 0; Mismatches 0;
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US-09-876-388-33
; Sequence 33, Application US/09876388
; Patent No. US20020049153A1
; GENERAL INFORMATION:
; APPLICANT: Bridon, Dominique P.
; APPLICANT: Erin, Alan M.
; APPLICANT: Ezrin, Alan M.
paplicant: Holmes, Darren L.
PRIOR APPLICATION NUMBER: 09/302,596
PRIOR FILING DATE: 1999-04-30
NUMBER OF SEQ ID NOS: 13
SSOFWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19, Application US/09876388
Patent No. US20020049153A1
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ORGANISM: Artificial Sequence
                                                                                                                                                     TYPE: PRT; ORGANISM: Heloderma suspectum US-09-953-0218-7
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Best Local Similarity
Matches 39; Conserv
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LENGTH: 40
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Ratent No. US20020147131A1
Ratent No. US20020147131A1
RAPELICANT: US20020147131A1
APPLICANT: COOLIGGe, Thomas L.
APPLICANT: COLIGGe, Maxio R.W.
TITLE OF INVENTION: Metabolic Intervention with GLP-1 to Improve the Function of Isch
TITLE OF INVENTION: Reperfused Skeletal Muscle 71ssue
FILE REFERENCE: P03660US6
CURRENT APPLICATION UNDER: US709/953,021B
CURRENT FILING DATE: 2001-09-11
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APPLICANT: COOLIDGE, MARIO.
TITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FITLE OF INVENTION: TREATMENT OF ACUTE CORONARY SYNDROME WITH GLP-1
FILE REFERENCE: 089187/0395
CURRENT FILING DATE: 2001-10-22
PRIOR APPLICATION NUMBER: 09/8859,804
PRIOR FILING DATE: 2001-05-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 208; DB 10; Best Local Similarity 100.0%; Pred. No. 1.4e-19; Matches 39; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                      NAME/KEY: AMIDATION
LOCATION: (39)...(39)
OCHER INFORMATION: amidated Ser (Serinamide)
US-09-003-869-1
; EARLIER APPLICATION NUMBER: US 60/055,404
; EARLIER FILING DATE: 1997-08-08
; EARLIER APPLICATION NUMBER: US 60/065,442
; EARLIER APPLICATION NUMBER: US 60/066,029
; EARLIER APPLICATION NUMBER: US 60/066,029
; NUMBER OF SEQ 1D NOS: 188
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ 1D NO 1
; LEWGTH: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 7, Application US/09982978 Patent No. US20020146405Al GENERAL INFORMATION:
                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Heloderma horridum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
LENGTH: 39
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RESULT 12
US-09-756-690A-14
iS equence 14, Application US/09756690A
is Bublication No. US20030036504A1
is GENERAL INFORMATION:
APPLICAMT: VOUNC, MONTEMAN, ORVILLE G.
TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA
CURRENT APPLICATION NUMBER: US/09/756,690A
CURRENT PILING DATE: 2000-01-10
PRIOR FILING DATE: 2000-01-10
NUMBER OF SEQ ID NOS: 188
SOFTWARE: Patentin Ver 2.1
SEQ ID NO 14
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APPLICANT: BEELET, NIGEL ROBERT ARNOLD

APPLICANT: BRANCSAR, SUNIL

TITLE OF INVENTION: USE OF SEXENDINS AND AGONISTS THEREOF FOR TITLE OF INVENTION: USE OF SEXENDINS AND AGONISTS THEREOF FOR TITLE OF INVENTION: USE OF SEXENDINS AND AGONISTS THEREOF FOR TITLE OF INVENTION: USE OF SEXENDINS APPLICATION NUMBER: US/09/003,869A

CURRENT PILING DATE: 1999-01-07

SEARLIER PILING DATE: 1997-01-07

SEARLIER FILING DATE: 1997-08-08

EARLIER FILING DATE: 1997-11-14

SERLIER PILING DATE: 1997-11-14

NUMBER OF SEQ ID NOS: 188

SOFTWARKE: FESSEQ FOR WINDOWS VERSION 3.0
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98.1%; Score 204; DB 9;
Best Local Similarity 97.4%; Pred. No. 4.5e-19;
Matches 38; Conservative 0; Mismatches 1.
                                                                                                                            1 HSDGTFTSDLSKQMEERAVRLFIEWLKNGGPSSGAPPPS 39
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Mismatches
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ORGANISM: Artificial Sequence
      100.08;
      Best Local Similarity 100.
Matches 39; Conservative
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US-09-876-388-34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Xaa represents Lys(E-MPA)-NH2-5TFA and where "E" represents Epsilus-09-876-388-33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide NAME/KEY: MOD_RES LOCATION: 400_RES LOCATION: 400
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APPLICANT: Extun. Alan M.
APPLICANT: Extun. Alan M.
APPLICANT: Extun. Alan M.
APPLICANT: Bolanc. Anouk
APPLICANT: Holmes. Darren L.
APPLICANT: St. Pierre. Serge.
TILLE OF INVENTION: LONG LESTING INSULINOTROPIC PEPTIDES
FILE REFERENCE: 5008620101610
CURRENT PELING DATE: 2001-09-34
PRIOR PILING DATE: 2000-09-05
PRIOR PRILING DATE: 2000-05-17
PRIOR PILING DATE: 2000-05-17
PRIOR FILING DATE: 1999-10-15
PRIOR PRIOR PRIOR DE NOS: 35
SOFTWARE: PATENTIN VET. 2.1
TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES
FILE REPRENCE: 500862001610
CURRENT PAPLICATION NUMBER: 2001-09-24
PRIOR PAPLICATION NUMBER: 09/623,618
PRIOR PAPLICATION NUMBER: 09/623,618
PRIOR FILING DATE: 2000-09-05
PRIOR FILING DATE: 2000-09-05
PRIOR PAPLICATION NUMBER: 6C/159,783
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-10-15
PRIOR FILING DATE: 1999-05-17
PRIOR FILING DATE: 1999-05-17
SEQ ID NOS: 35
SOFTWARE: PALENTIN VOICE: 2.1
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APPLICANT: Bridon, Dominique P.
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RESULT 14
U.S. 14-690A-2
| Sequence 2, Application US/08756690A
| Sequence 2, Application US/08756690A
| Sequence 2, Application No. US20030036504A1
| GENERAL INNORMATION:
| APPLICANT: KOLTERMAN, ORVILLE G. APPLICANT: YOUNG, ANDREW A. ITILE OF INVENTION: TRIGLYCERIDE LEVELS AND AGONISTS THEREOF FOR MODULATION OF TITLE OF INVENTION: TRIGLYCERIDE LEVELS AND TREATMENT OF DYSLIPIDEMIA FILE OF EXEMPLY APPLICATION NUMBER: US/09/756,690A CURRENT APPLICATION NUMBER: 00/15,365 PRIOR FILING DATE: 2000-01-10 |
| PRIOR FILING DATE: 2000-01-10 |
| SEQ ID NO 2 |
| SED NO 2 |
| SED NO 3 |
| SED N
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| Sequence 12, Application US/09876388
| Patent N. US/0020049133A1
| GENERAL INFORMATION:
| APPLICANT: Eridon, Dominique P. APPLICANT: Eridon, Dominique P. APPLICANT: Eridon, Alan M. APPLICANT: Estin, Alan M. APPLICANT: LADIMES, Darren L. APPLICANT: LADIMES, Darren L. APPLICANT: LADIMES, Darren L. APPLICANT: St. Pierre, Serge TITLE OF INVENTION: LONG LASTING INSULINOTROPIC PEPTIDES FILE REFRENCE: 500862001610
| CURRENT APPLICATION NUMBER: US/09/876,388 |
| CURRENT APPLICATION NUMBER: 09/62,468 |
| PRIOR FILING DATE: 2000-09-05 |
| PRIOR FILING DATE: 2000-05-17 |
| PRIOR FILING DATE: 1999-01-15 |
| PRIOR FILING DATE: 1999-01-15 |
| PRIOR FILING DATE: 1999-05-17 |
                                                                                                                                                                                                                                      Length 39;
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96.2%; Score 200; DB 9; Length 39
Best Local Similarity 94.9%; Pred. No. 1.4e-18;
Matches 37; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                 Indels
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98.1%; Score 204; DB 10;
Best Accal Similarity 97.4%; Pred. No. 4.5e-19;
Matches 38; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                    1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HGDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                 NAME/KEY: AMIDATION
COCATION: (39)...(39)
COTHER INFORMATION: amidated Ser (Serinamide)
US-09-003-869-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: c-term amidation US-09-756-690A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Heloderma suspectum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Exendin-4 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
US-09-876-388-12
FEATURE:
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; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
LENGTH: 39
; TYPE: PRT
ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-09-876-388-12
OUETY Match
Best Local Similarity 94.9%; Pred. No. 1.4e-18;
Matches 37; Conservative 1: Mismatches 1; Indels 0; Gaps
OY 1 HSDGTFTSDLSKQMEDEAVRLFIEWLKNGGPSSGAPPPS 39
| IGHITION | IG
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March 28, 2003, 08:35:18; Search time 43 Seconds (without alignments) 87.192 Million cell updates/sec
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GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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1: pir1:*
2: pir2:*
3: pir3:*
1: pir4:*
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Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	1	exendin-4 - Gila m	precu	G2	glucagon G1 · Nort	glucagon precursor	glucagon-like pept	glucagon precursor	ı	Н	glucagon II precur	glucagon 2 precurs	like	7			glucagon precursor	gon	١	•		_	_						glucagon precursor
SUMMARIES	Œ	HWGH32	HWGH4G	GCFGB	S44472	S44471	GCIDC	S44473	GCGXA	151093	151058	151057	GCAF2	B61125	C61125	GCDF	GCONC	CCCH	I51301	GCFLE	S07211	A61135	GCFIS	GCPG	GCHU	GCGP	GCRIDO	GCRT	GCHY	GCBO
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	Result No.		7	e	4	Ŋ	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	50	21	22	23	24	25	26	27	. 28	29

ć	u	0	0 0 1	c	A57294	alucadon precursor	
3.0	9 8	40.4	124	٠,	GCAF		
3.5	83.	39.9	29	-	GCCB	•	
33	83	39.4	29	~	A91741	•	
34	82	39.4	59	N	A91742	glucagon - Arabian	
35	82	39.4	29	N	C39258	ľ	
36	82	39.4	69	Н	GCDG69	-69	
37	81	38.9	29	7	C60840	H	
38	77	37.0	53	Н	GCOPV	•	
39	77	37.0	29	N	A91740	,	
40	16	36.5	53	Н	GCDK	•	
41	16	36.5	53	Н	A61583	•	
42	16	36.5	29	7	GCEN	•	
43	92	36.5	53	٦,	GCTTS	glucagon - slider	
		•	67	7	839018		
45	73.5	35.3	36	7	D60840		
					ALIGNMENTS	S.F.	
RESULT 1							
HWGH3Z exendin-3		- Mexican beaded lizard	ided 11	2a1			
C; Species: Heloderma horridum (Mexican	S: Helo	derma hc	orridum	2 2		beaded lizard) 31-Mar-1993 #text change 21-Nov-1997	
C; Accession: A23674	ton: A2))	ĺ			
R; Eng, J.; Andrews,	.; Andr		Kle	in	nan, W.A.; S11	P.C.; Kleinman, W.A.; Singh, L.; Raufman, J.P.	
J. Blol. Chem. 265, 20259-	Chem.	265, 201	ZUZDY-ZUZBZ, 1990 n and structure o	7 5	ų.	exendin-3, a new nancreatic secretadoque	isc
A; Refere	ritina oce num	ber: A23	3674; M	H	A; Reference number: A23674; MUID:91056067; PMID:1700785		
A; Accession: A23674	ion: A2	3674					
A; Molecule type: protein	le type	: prote	r.				
A; Residue	es: 1-3	9 <eng></eng>	ECCOON 6	5	A;Residues: 1-39 <eng></eng>	are thought to bind to receptors	for
a in seci	retion	of amyle	ase.	-	and the same dimensional transfer of the same dimensional transfer	}	
C; Superf	amily:	glucagor	-		C;Superfamily: glucagon		
C; Keywords: am	ds: ami	dated co	arboxyl	õ	idated_carboxyl end; duplication of the carboxyl end (S)	tion; secretagogue; venom /ser) #etatus experimental	
F; 39/MOD		ire: alli.	מש רבת	ğ	c) with troops	1 13 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
Query Match	Match			100.08;		DB 1;	
Best Local		겉	larity 100.0%; Conservative		%; Pred. No. 4. 0; Mismatches	4.2e-19; thes 0; Indels 0; Gaps 0;	
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C;Species: Heloderma suspectum (Gila monster)
C;Species: Heloderma suspectum (Gila monster)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 21-Nov-1997
C;Accession: A42486
E;REDG, J.; Kleinman, W.A.; Singh, L.; Singh, G.; Raufman, J.P.
J. Biol. Chem. 267, 7402-7405, 1992
A;Title: Isolation and characterization of exendin-4, an exendin-3 analogue, from B A;Reference number: A42486, MUID:92218391; PMID:1313797
A;Reference number: A42486
A;Reference number: A42486
A;Reference number: A52486
A;Residue: 1-39 PENC; C.Comment: Exendin-4 does not stimulate amylase secretion by pancreatic acinar cell (C.Superfamily: glucagon C.Keywords: amidated carboxyl end; duplication; venom F;39/Modified site: amidated carboxyl end (Ser) #status experimental Length 39; Ouery Match 96.2%; Score 200; DB 1; Length 39 Best Local Similarity 94.9%; Pred. No. 4.1e-18; Matches 37; Conservative 1; Mismatches 1; Indels

ò qq exendin-4 - Gila monster

RESULT 2

1 HSDGTFTSDLSKQMEEBAVRLFIEWLKNGGPSSGAPPS 39

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Gaps ; 0 a

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Squayson-like peptide - North American paddlefish (Polyodon spathula)
Glucagon-like peptide - North American paddlefish (Polyodon spathula
C;Species: Polyodon spathula
C;Species: Polyodon spathula
C;Accession: S44473
R;Nguyen, T.M.; Mommsen, T.P.; Mims, S.M.; Conlon, J.M.
Biochem. J. 300, 339-345, 1994
A;Fitle: Characterization of insulins and proglucagon-derived peptides from a phyloge A;Feference number: S44467; MUD:94271144; PMID:8002937
A;Nocession: S4447
A;Noc
R;Nguyen, T.M.; Mommsen, T.P.; Mims, S.M.; Conlon, J.M.
Biochem. J. 300, 339-345, 1994
A;Pitle: Characterization of insulins and proglucagon-derived peptides from a phyloge
A;Reference number: S44467; MUD:94271144; PMID:8002937
A;Reference number: S44471
A;Rolecule type: protein
A;Residues: 1-31 <NGU>
A;Residues: 1-31 <NGU>
A;Reportmental source: pancreas
C;Superfamily: glucagon
C;Reywords: carbohydrate metabolism; duplication; hormone; pancreas
F;1-31/Product: glucagon G1 *status predicted <NAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glücagon precursor - channel catfish (fragments)
C;Species: Ictalurus punctatus (channel catfish)
C;Species: Ictalurus punctatus (channel catfish)
C;Accession: A05166, A05167
R;Andrews, P.C.; Ronner, P.
J. Blol. Chan. 260, 3910-3914, 1985
J. Blol. Chan. 260, 3910-3914, 1985
A;Fitle: Isolation and structures of glucagon and glucagon-like peptide from catfish A;Reference number: A92514; MUID:85157536; PMID:3838546
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A, Residues: 30-63 <AND2>
C, Superfamily: glucagon
C, Reywords: carbohydrate metabolism; duplication; hormone; pancreas
F;1-29/Product: glucagon #status experimental <GCN>
F;30-63/Product: glucagon-like peptide 1 #status experimental <GLI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 31;
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51.6%; Pred. No. 2.1e-05;
tive 9; Mismatches 6;
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Pred. No. 2.2e-05;
5; Mismatches 7;
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Pred. No. 9.9e-06;
5; Mismatches 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | :|||:|||:| | 30 HADGTYTSDVSSYLQDQAAKDFITWLKSGQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG
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Best Local Similarity 58.6%;
Matches 17; Conservative
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A; Residues: 1-29 <AND1>
A; Accession: A05167
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Matches 16; Conserv
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Best Local S:
Matches 17
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                                                                                                                                                                                                                                                   Nictionate names: oxyntomodulin
Nicontains: glucagon; glucagon-16 (oxyntomodulin); glucagon-like peptide 1; glucagon-lik
C;Specids: Rana catesbelana (bullfrog)
C;Date: 13-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998
C;Accession: B28091; C28091; D28091
R;Pollock, H.G.; Hanilton, J.W.; Rouse, J.B.; Ebner, K.E.; Rawitch, A.B.
J:Blol. Chem. 263, 9746-9751, 1988
A;Title: Isolation of peptide hormones from the pancteas of the bullfrog (Rana catesbela
A;Reference number: A92730; MUID:88257102; PMID:3260236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ringuyen, T.M.; Mommusen, T.P.; Mims, S.M.; Conlon, J.M.
Biochem. J. 300, 339-345, 1994
A;Title: Characterization of insulins and proglucagon-derived peptides from a phylogenet
A;Reference number: S44467; MUID:94271144; PMID:8002937
A;Accession: S44472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: protein
A; Residues: 1-31 < NGU>
A; Note: the sequence from Fig. 3 is inconsistent with that from Fig. 5 in having 29-Glu
C; Superfamily: glucagon
C; Superfamily: glucagon metabolism; duplication; hormone; pancreas
F;1-31/Product: glucagon G2 #status predicted < GCN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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C.$pecies: Polyodon spathula
C;Date: 18-Sep-1997 #sequence_revision 18-Sep-1997 #text_change 07-May-1999
C;Accession: S44471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       glucagon G2 - North American paddlefish (Polyodon spathula)
C;Species: Polyodon spathula
C;Date: 19-Mar-1997 #sequence_revision 12-Dec-1997 #text_change 07-May-1999
C;Accession: S44472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: D28091
A; Molecule type: protein
A; Residues: 69-101 - PR03-
A; Residues: 69-101 - PR03-
A; Residues: 69-101 - PR03-
C; Superfamily: 91ucagon etabolism; duplication; hormone; pancreas
F; 1-36/Product: 91ucagon *status predicted <GCN>
F; 1-29/Product: 91ucagon *status predicted <GCN>
F; 37-67/Product: 91ucagon-11ke peptide 1 *status experimental <GII>
F; 69-101/Product: 91ucagon-11ke peptide 2 *status experimental <GII>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 54.8%; Pred. No. 1,5e-05;
Matches 17; Conservative 7; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 31;
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Pred. No. 5.6e-06;
6; Mismatches 6;
                                HGEGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGP 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
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Local Similarity 58.6%;
hes 17; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: protein
A; Residues: 1.36 <PO2>
A; Accession: C28091
A; Molecule type: protein
A; Residues: 37-68 <POL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Si
Matches 17;
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ducagon II precursor - rainbow trout
C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
C;Date: 15-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999
Mol. Endocrinol. 9, 267-277, 1995
A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcrans A;Reference number: A55895; MuID:95295739; PMID:7776976
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-178 < IRW>
A;Residues: 1-178 < IRW>
A;Cross-references: EMBL:U19914; NID:9736352; PIDN:AAC59668.1; PID:9736363
A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcr
A;Reference number: A55895; MUID:95295739; PMID:7776976
A;Accession: 151058
A;Accession: E1008
A;Molecule type: mRNA
A;Residues: 1-178 < IRM>
A;Residues: 1-178 < IRM>
A;Cross.references: EMBL:U19917; NID:9736364; PIDN:AAC59669.1; PID:g736365; GB:S784
A;Accession: 151299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: mRNA
A;Residues: 58-123 <IR3>
A;Cross-references: EMBL:U19913; NID:q736360; PIDN:AAC59667.1; PID:q736361
A;Accession: 151037
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 'M',114-144 <IR4>
A;Residues: 'M',114-144 <IR4>
A;Residues: 'M',114-144 <IR4>
A;Cross-references: EMBL:U19919; NID:q736374; PIDN:AAC60213.1; PID:q736377
A;Crossion: 151036
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A,Molecule type: DNA
A,Residues: 113-123 <IR5>
A,Cross references: BMBL:U19918; NID:g/36373; PIDN:AAC60212.1; PID:g/36376
C,Genetics:
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A;Residulas: 113-144 <IR2>
A;Crost references: EMBL:U19916; NID:9736369; PIDN:AAC60210.1; PID:9736372
A;Accession: 151038
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A;Residues: 113-123 <IR3>
A;Cross-references: EMBL:U19915; NID:q736368; PIDN:AAC60209.1; PID:g736371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                              A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Mostdues: 22-53, X', 55-123 <IR2>
A;Cross.references: GB:S78473; NID:g999382; PIDN:AAB34504.1; PID:g999383
A;Accession: 151056
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44.7%; Score 93; DB 2;
48.3%; Pred. No. 0.00036;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 44.7%; Score 93; DB-Best Local Similarity 48.3%; Pred. No. 0.00 Matches 14; Conservative 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |:|||:|||:|
90 HADGTYTSDVSTYLQDQAAKDFVSWLKSG 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Introns: 123/2
C; Superfamily: glucagon
C; Keywords: duplication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Introns: 123/2
C;Superfamily: glucagon
C;Keywords: duplication
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                                                                                                                                                                                                                                                              N:Conthins: glucagon; glucagon; glucagon; glucagon: glucagon-like peptide 1
C;Species: Lepisosteus spatula (alligator gar)
C;Species: Lepisosteus spatula (alligator gar)
C;Date; 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998
C;Date; 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 20-Mar-1998
C;Accession: S06339; S06871
R;Pollock, H.G.; Kimmel, J.R.; Ebner, K.E.; Hamilton, J.W.; Rouse, J.B.; Lance, V.; Rawi
Gen. Comp. Endocrinol. 69, 133-140, 1988
A;Reference number: S06339; MUID:88196798; PMID:3282974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Wolecule type: protein
A;Residues: 372 < 2002>
C;Comment: X's at positions 37-38 represent a pair of basic amino acids forming a cleave
C;Superfamily: glucagon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dlucagon - chinook salmon (fragment)
Cispecies: Oncorhypichus tschawytscha (chinook salmon)
Cispecies: Oncorhypichus tschawytscha (chinook salmon)
Cispacesion: I51093
Ritthin, Dan, Wongu, J.
Moi. Badocrinol. 9, 267-277, 1995
A;Title: Trout and chicken proglucagon: alternative splicing generates mRNA transcripts
A;Reference number: A55895; MuID:95295739; PMID:7776976
A;Accession: I51093
A;Actus: predliminary; translated from GB/EMBL/DDBJ
A;Rocus references: BRNL: U19920; NID:9736366; PIDN:AACS9670.1; PID:9736367
C;Superfamily: glucagon
C;Superfamily: glucagon
C;Superfamily: glucagon
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C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 13.5ep-1996 #sequence_revision 13.5ep-1996 #text_change 16-Jul-1999
C;Accession: 151058; 151299; 151056; 151037; 151036; 151300
R;Irwin, D.M.; Wong, J.
Mol. Endocrinol. 9, 267-277, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas $1.36/Product: glucagon-36 (cxyntcondoulin) #status experimental <036>F:1-29/Product: glucagon #status predicted <GCNN F:39-70/Product: glucagon-11ke peptide 1 #status predicted <GL1>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 44.7%; Score 93; DB 2; Length 66; Il Similarity 48:8; Pred. No. 0.00012.
14; Conservative 10; Mismatches 5; Indels
                                                                                                                                                                                                              glucagon precursor - alligator gar (fragment)
N.Altephate names: oxyntomodulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
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33 HADGTYTSDVSTYLQDQAAKDFVSWLKSG 61
           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: protein A; Residues: 1-36 <POL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: S06871
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Matches
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IS1058
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Gaps

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Length 30;

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Ricolon, J.M.; O'Toole, L.; Thim, L.
FEBS Lett. 214, 50-56, 1987.
A;Ttile: Primary structure of glucagon from the gut of the common dogfish (Scyllorhin A;Reference number: A26992; MUID:87190953; PMID:3569517
A;Title: The primary structure of glucagon-like peptide but not insulin has been cons A;Reference number: A61125; MUID:91340068; PMID:1874385 A;Accession: C61125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    glucagon - smaller spotted catshark
C;Species: Scyllorhinus canicula (smaller spotted catshark, smaller spotted dogfish)
C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 20-Mar-1998
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A.Residues: 1-29 <CON>
C.Superfamily: glucagon
C.Superfamily: carbohydrate metabolism; duplication; hormone; intestine; pancreas
                                                                                                                                                                    A.Molecule type: protein
A.Molecule type: protein
A.Residues: 1.30 <CON>
C.Superfamily: glucagon
C.Keywords: amidated carboxyl end; duplication
C.Keywords: glucagon-like peptide #status experimental <GLP>
F:1-30/Modified site: amidated carboxyl end (Arg) #status experimental
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Pred. No. 0.00021;
5; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43.3%; Score 90; DB 2; illarity 44.8%; Pred. No. 0.00012; Conservative 10; Mismatches 6
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Job time : 43 secs
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Best Local Similarity 53.6%;
Matches 15; Conservative
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Matches 13; Conserv
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C; Species: Anguilla rostrata (American eel)
C; Species: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 21-Nov-1997
C; Accession: B61125
R; Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.
Gen. Comp. Emdocrinol. 82, 23-32, 1991
A; Title: The primary structure of glucagon-like peptide but not insulin has been conserve, Reference number: A61125; MUID: 91340068; PMID: 1874385
A; Resion: B61125
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J. Biol. Chem. 258, 3280-3284, 1983
A;Title: Anglerfish islet pre-proglucagon II. Nucleotide and corresponding amino acid A;Reference number: A05150; MUID:83135785; PMID:6338015
A;Accession: A05150
A;Accession: A0515
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C;Species: Anguilla anguilla (European eel)
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 21-Nov-1997
C;Accession: C61125
R;Conlon, J.M.; Andrews, P.C.; Thim, L.; Moon, T.W.
Gen. Comp. Endocrinol. 82, 23-32, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            glucagon; 2 precursor - American goosefish
N;Contains: glucagon; glucagon-like peptide 1
S;Species: Lophus americanus (American goosefish)
C;Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 21-Jul-2000
C;Accession: A05150
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C;Keywords: carbohydrate metabolism; duplication; hormone; pancreas
C;Keywords: carbohydrate metabolism; duplicated <SIG>
F:12-122/Product: proglucagon 2 #status predicted <PGC2>
F;52-80/Product: glucagon #status predicted <GCN>
F;89-119/Product: glucagon-11ke peptide 1 #status predicted <GLI>
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43.3%; Score 90; DB 2; Length 30;
Best Local Similarity 44.8%; Pred. No. 0.00012;
Matches 13; Conservative 10; Mismatches 6; Indels
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Gaps

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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208
1 HSDGIFTSDLSKQMEEEAVRLFIEWLKNGGPSŠGAPPPS 39
GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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SUMMARIES

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		E4_HELSU	GLUC_ICTPU	GLUC_RANCA	GLUC_PIAME	GLUC_LEPSP	GLUC_CARAU	GLUM ANGAN	GLUC SCYCA	GLUC_ONCKI	GLUC_CHICK	GLUC_PLAFE	GLUC_TORMA	GLUC_MYOSC	GLUC_PIG	GLUC_BOVIN	GLUC_CAVPO	GLUC_HUMAN	GLUC_MESAU	SLUC_MOUSE	GLUC_OCTDE	GLUC_RAT	GLU1_ORENI	GLU1_LOPAM	GLUC_CHIBR	GLUC_RABIT	GLUC_CANFA	GLU2 ORENI	GLUC_DIDMA	GLUC_ANAPL	GLUC_CALMI	SLUC_AMICA
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O9prq9 lampetra fl P09682 hydrolagus P04203 heloderma s P09910 canis famil P01279 sus scrofa P01282 homo sapien P15442 saccharomyc P09683 homo sapien P1384 rattus norv P31299 ovis aries P04566 cavia porce	S.E.	39 AA. update) n update) beaded lizard). tra; Vertebrata; Euteleostomi;	man JP. ncreatic m.";	iolodical ACTIVITY. INTERACTS venomous gland. FAMILY.	3; DB 1; Length 39; 1.96-20; thes 0; Indels 0; Gaps , 0; 3APPPS 39 	ARD; PRT; 87 AA. , Created) , Last sequence update) , Last annotation update) , Last annotation update) (Glla monster). Chordata; Craniata; Vertebrata; Euteleostomi; ta; Scleroglossa; Anguimorpha; Helodermatidae;
GLUC_LAMFL GLUC_HYDCO EXEL_HELSU SECR_CANFA SECR_LOTO VIP_HUWAN GCNZ_YEAST SECR_HUWAN SECR_RAT SECR_RAT VIP_CAVPO VIP_CAVPO	ALIGNMENT	PRT; uence u otation iexican Craniat	00785; of exemplar of exemplar 1262(1990).	CEPTOR: CEPTOR: CEPTOR: CEPTOR: Produced by the venome TO THE GLUCAGON FAMILIA LOAGON: 1. 1. GON: 1. AMIDATION. MW; A4425ID3A4BIDIB9	tch al Similarity 100.0%; Score 208; DB 39; Conservative 0; Mismatches HSDGTFTSDLSKQMEEBAVRLFIEWLKNGGPSSGAPPPS H;	PRT; (steed): sequence up: annotation monster).
229 1 386 1 37 27 1 131 1 131 1 170 1 134 1 27 1 170 1		STANDARD: 1. 17, Created) 1. 17, Last seg 1. 41, Last ann dum horridum (M zoa; Chordata;	ubMed=17 , Kleinm tructure ed from 20259-20	NDIN RECEPTOR. LOCATION: SECRETOR LOCATION: Secreted FICTITY: Produced by BELONGS TO THE GLUI H32. H32. GLUCAGON: Cormone2; 1. GLUCAGON: GLUCAGON: TGLUCAGON: TGLUCAG	100.0%; 100.0%; vative MEEEAVRLFI	0 40H · 6
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7.7 60 61 60 60 60 60 60 60 60 60 60		HELHO EXE3. HELHO STAND P20394; 01.FEB-1991 (Rel. 17 01.FEB-1991 (Rel. 17 15.JUN-2002 (Rel. 41 Exendin-3. Heloderma horridum h Heloderma horridum h Everydin-3.	Lepidocana. Jay Heldderma. NCBI_TaxID=8552; COURNCE. TISSUE=Venom; TISSUE=9105606; Find J., Amedia and J., Amedia and J., Blol. Chem. 2. Balol. Chem. 2. Balol. Chem. 2.	FUNCTION: HAS A VIP/S WITH THE EXENDIN RECE SUBCELLULAR LOCATION: TISSUE SPECIFICITY: SIMILARITY: BELONGS J PIR; A23674; HWGH32. PIRSP: PO1275; 1BH0. InterPro; IPR000532; Gluc Ffam; PF00123; hormone2; SMART; SM00070; GLUCAG GLUCAGO GLUCAG GLUCAGO GLUCAG GLUCAGO GLUCAG GLUCAGO GLUCAG GLUCAGO GLUCAG GLUCAGO GLUCAG		HELSU 9, 12-1999 10-1999 N-200 11-4 erma Yota;
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Biochem. Biophys. Res. Commun. 143:87-92(1987).
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                                                      SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

Chen Y.E., Drucker D.J.;

Chen Y.E., Drucker D.J.;

"Itsaue specific expression of unique mRNAs that encode proglucagon-
derayed peptides or exendin 4 in the lizard.";

ploal. Chem. 272.4108-4115(1997).
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Ictalurus punctatus (Channel Catfish).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostel; Ostarlophysi; Siluriformes;
Ictaluridae; Ictalurus.
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AMIDATION (G-87 PROVIDE AMIDE GROUP).
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MEDLINE-87156787;
HODGLINE-87156787;
HODGLIN N.M., Mahrenholz A.M., Andrews P.C., Gurd R.S.;
"Biological activities of catfish glucagon and glucagon-like peptide.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96.2%; Score 200; DB 1; Length 87; larity 94.9%; Pred. No. 5.1e-19; Conservative 1; Mismatches 1; Indels
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PIR; A4246; HWGH4G.
InterPro; IPR000532; Glucagon.
Pfam; PF00123; hormone2; 1.
SMART; SW00070; GLUCA; 1.
FROSTIE; PS00260; GLUCAGON; 1.
Glucagon family; Toxin; Amidation; Signal.
23
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01-MAR-1989 (Rel. 10, Last sequence update)
01-NOV-1990 (Rel. 16, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                IISSUE*Venom;
MEDLINE=92218391; PubMed=1313797;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     87 AA; 9479 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
es 37; Conserv
                                                                                                                                                                                               SEQUENCE OF 48-86.
Heloderma.
NCBI_TaxID-8554;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=7998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GLUC_ICTPU
P04093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
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J. BIOL. Chem. 260:3910-3914(1985).

J. BIOL. Chem. 260:3910-3914(1985).

J. BIOL. Chem. 260:3910-3914(1985).

THE BLOOD SUGAR LEVEL.

IN BESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

J. MISCELLANBOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOWOLOGY WITH AMERICAN GOOSEPISH SEQUENCES.

JESTMILARITY: BELONGS TO THE GLUCAGON FAMILY.

PIR: A05166; GCIDC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                        Andrews P.C., Ronner P.; "Isolation and structures of glucagon and glucagon-like peptide from catfish pancreas.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLUC_RANCA STANDARD; PRT; 103 AA. ; 1013 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49.0%; Score 102; DB 1; Length 71; 54.8%; Pred. No. 1.6e-06; tive 8; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24688E79AD981A8F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GLUCAGON.
GLUCAGON-LIKE PEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E -> D (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGP 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-Pancreas;
MEDLINE-88257102; PubMed-3260236;
                                   TISSUE-Pancreas;
MEDLINE-85157536; PubMed-3838546;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP; P01274; IGCN.
InterPro: IPR000532; Glucagon.
Pfam; PF00123; hormone2; 2.
SMART; SM00070; GLUCA; 2.
PROSITE; PS00260; GLUCAGON; 2.
Glucagon family; Hormone.
NON TER 1 GLUCAGON; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIR; B28091; GCFGB.
HSSP; P01274; 1GCN.
INTEPPRO; IPR000532; Glucagon.
PRINTS; PR00275; GLUCAGON.
SMARY; SW0070; GLUCAGON.
PROSITE; PS00260; GLUCAGON; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71 AA; 8173 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 54.8
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PEPTIDE
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLUC_RANCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
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01-NOV-1990 (Rel. 16, Last sequence update)
| Locy-2001 (Rel. 140, Last annotation update)
| Locy-2001 (Rel. 140, Last annotation update)
| Glucagon precursor [Contains: Glucagon; Glucagon-36 (oxyntomodulin);
| Glucagon-like peptide] (Fragment).
| Clucagon-like peptide] (Fragment).
| Lepisosteus spatula (Alligator gar) (Atractosteus spatula).
| Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
| Actinopterygil; Neopterygil; Semionotiformes; Lepisosteidae;
                                                                                                                                             TISSUE-Pancreas;
MEDLINE-88196798; PubMed-3282974;
MEDLINE-88196798; PubMed-3282974;
Pollock H.G., Kimmel J.R., Ebner K.E., Hamilton J.W., Rouse J.B.,
Lance V., Rawitch A.B.;
"Isolation of alligator gar (Lepisosteus spatula) glucagon,
oxyntomodulin, and glucagon-like peptide: amino acid sequences of
oxyntomodulin and glucagon-like peptide.";
Gen. Comp. Endocrinol. 69:133-140(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P01274; 1GCN.
InterPro; IPR000532; Glucagon.
                                                                                                                                                                                                                                                             PRELIMINARY SEQUENCE OF 1-29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78 AA; 8990 MW;
                                                                                                                                 SEQUENCE OF 1-36 AND 45-78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                       NCBI_TaxID-7917;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GLUC_CARAU
P79695;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PEPTIDE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GLUC_CARAU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -1. INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
-1. MISCELLANEOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH
OTHER PISTS SEQUENCES.
-1. SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
HSSP; P01274; IGCN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 de Lima J.A., Oliveira B., Conlon J.M.;
hpurification and characterization of insulin and peptides derived
from proglucagon and prosomatostatin from the fruit-eating fish, the
pacu Plaractus mesopotanicus.;
comp. Biotohm. Physiol. 1228:127-135(1999).
THE BLOOD SUGAR LEVEL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                Glucagon precursor (Fragment).
Plaractus mesopotamicus (Pacu).
Plaractus mesopotamicus (Pacu).
Actinopterygii: Neopterygii: Teleostei: Ostarlophysi: Characiformes: Characidae, Plaractus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                     ;
0
                                                                                                          Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 98; DB 1; Length 71;
Pred. No. 5.2e-06;
9; Mismatches 6; Indels
                                                                                                       49.0%; Score 102; DB 1; Length 10
1larity 54.8%; Pred. No. 2.4e-06;
Conservative 7; Mismatches 7; Indels
                                 (OXYNTOMODULIN)
                     29 GLUCAGON.
36 GLUCAGON-36 (OXYNTOMODULIN
70 GLUCAGON-LIKE PEPTIDE 1.
17 GLUCAGON-LIKE PEPTIDE 2.
103 316287B7BAELG8F7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71 AA; 8146 MW; F66A3CA2DD9806C5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLUCAGON.
GLUCAGON-LIKE PEPTIDE.
                                                                                                                                                                                                                                                                                30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ā
                                                                                                                                                                                                                                                     71 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGP 31
                                                                                                                                                              1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGP 31
                                                                                                                                                                            GLUCAGON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Pancreas;
MEDLINE-99259587; PubMed-10327603;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPP000532; Glucagon. Pfam; PF00123; hormone2; 2. PRINTS; PR00275; GLUCAGON. SMARY; SM0070; GLUCA; 2. PROSITE; PS00260; GLUCAGON; 2. GLUCAGON family; Hormone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GLUC_LEPSP STANDARD; F
P09566;
01-MAR-1989 (Rel. 10, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            47.1%;
illarity 51.6%;
Conservative 9
        Glucagon family; Hormone.
                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                    103 AA;
                                                                                                                          Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=42528;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16;
                                                                                                                                                                                                                                                      GLUC_PIAME P81880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NON_TER
SEQUENCE
                                PEPTIDE
PEPTIDE
NON_CONS
PEPTIDE
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                              Querk Match
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
GLUC_LEPSP
                                                                                                                                                                                                                                RESULT 5
GLUC_PIAME
                                                                                                                            Best Loca
Matches
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insulin and pancreatic polypeptide.";

Gen. Comp. Endocrinol. 67:375-382(1987).

1- FUNCTION: PROMOTES HIDOLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES

1- FUNCTION: PROMOTES HIDOLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES

1- INDUCTION: PROMOTES HIDOLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES

1- INDUCTION: PROMOTES HIDOLYSIS OF THE ISLETS OF LANGERHANS

1- MISCELLANBOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH

MISCELLANBOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH

MIRRICAN GOOSEFISH SEQUENCES.

1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Meopterygii; Teleostei; Ostarlophysi; Cypriniformes; Cyprinidae; Carassius.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
116-CCT-2001 (Rel. 40, Last annotation update)
Glucagon precursor (Contains: Glicentin-related polypeptide (GRPP);
Glucagon; Glucagon-like peptide)
Carassius auratus (Goldfish)
                                           Pollock H.G., Kimmel J.R., Hamilton J.W., Rouse J.B., Ebner K.E., Lance V., Rawitch A.B.; "Isolation and structures of alligator gar (Lepisosteus spatula)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 94; DB 1; Length 78;
Pred. No.1.9e-05;
9; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GLUCAGON-36.
GLUCAGON-LIKE PEPTIDE.
30106496271594E0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GLUCAGON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
Yuen T.T.H., Mok P.Y., Chow B.K.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
TISSUE-Pancreas;
MEDLINE-88030594; PubMed-3311873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00123; hormone2; 2.
SMART; SM00070; GLUCA; 2.
PROSITE; PS00260; GLUCAGON; 2.
QLUCAGON family; Hormone.
PEPTIDE 1 36 GLU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The primary structure of glucagon-like peptide but not insulin has a "The primary structure of glucagon-like peptide but not insulin has removed the perimary structure of glucagon-like peptide but not insulin has been conserved between the American eel, Anguilla rostrata and the European eel, Anguilla angulla "; Gen. Comp. Endocrinol. 82:23-32(1991).

"The primary structure of glucagon ramin."

"The primary structure of glucagon ramin."

"This beings is structure of glucagon."

"The primary structure of glucagon."

"The properties glucagon glucagon."

"The properties glucagon."

"The pro
                                                                                                                                                           EMBL: V00632; CAAZ3905.1; -...
PIR; A05150; GCAF2.
INESP: POL124; IGCA.
InterPro: IPR00033; Glucagon.
Pfam; PF00123; hormone2; 2.
PR00757; GLUCAGON.
SMART; SM0070; GLUCA.
PR00571E; PS002560; GLUCA.
GLUCA, 2.
PR051TE; PS002560; GLUCA.
GLUCAGON: 2.
Glucagon family; Hormone; Cleavage on pair of basic residues; Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Divor.1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last annotation update)
Glucagon-like peptide (GLP).
Anguilla anguilla (European freshwater eel), and
Anguilla rostrata (American eel).
Eukaryota; Metazoa; Chordata; Graniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Anguilliformes; Anguillidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43.8%; Score 91; DB 1; Length 122;
48.3%; Pred. No. 7.7e-05;
ive 9; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                              GLICENTIN-RELATED POLYPEPTIDE GLUCAGON II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLUCAGON-LIKE PEPTIDE II. 5140AC47EF915519 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOD_RĒS 30 30 AMIDATION.
SEQUENCE 30 AA; 3376 MW; 592DAŠEABD6E49D0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43.3%; Score 90; DB 1; Ler
44.8%; Pred. No. 2.1e-05;
tive 10; Mismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IISSUE=Pancreas;
MEDLINE=91340068; PubMed=1874385;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14171 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 48.3
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=7936, 7938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                               22
52
83
83
83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLUM ANGAN
P41521;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PEPTIDE
SEQUENCE
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PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROPEP
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GLUM_ANGAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
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                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Euchean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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01-NOV-1986 (Rel. 03, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation)
17 Glucagon II precursor (Contains: Glicentin-related polypeptide (GRPP);
16-Ophius americanus (American goosefish) (Anglerfish).
17 Eucharyota; Metazoa; Chordata; Craniata; Buteleosten;
18 Actinopterygii; Neopterygii; Teleostel; Buteleostel; Neoteleostel;
18 Acanthomorpha; Paracanthopterygii; Lophilformes; Lophildae; Lophius.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro: IPR000532; Glucagon.
Prami, PR00123; hormone2; 2.
Prami, PR00123; hormone2; 2.
SMART; SM00070; GLUCA; 2.
SMART; SM00070; GLUCA; 2.
Glucagon family: Hormone; Cleavage on pair of basic residues; Signal.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                    Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.
-1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES THE BLOOD SUGAR LEYEL.
-1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE-8138785; PubMed-6338015; MEDLINE-81387885; PubMed-6338015; Lund P.K., Goodman R.H., Montminy M.R., Dee P.C., Habener J.F.; Lund P.K., Goodman R.H., Montminy M.R., Dee P.C., Habener J.F.; Anglerfish islet pre-proglucagon II. Nucleotide and corresponding amino acid sequence of the cDMR."; J. Blol. Chem. 258:3284 (1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
GLICENTIN-RELATED POLYPEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   43.8%; Score 91; DB 1; Length 121;
45.2%; Pred. No. 7.6e-05;
ive 10; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLUCAGON-LIKE PEPTIDE.
SC1D4BEC1D26B9C6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 45.2%; Pred. No. 7.6¢ ies 14; Conservative 10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGP 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLUCAGON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-86286913; PubMed-3526301;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 AA; 13527 MW;
                                                                                                                                                                                                                                                                                                                                                                    EMBL; U65528; AAB39563.1; -.
HSSP; P01274; IGCN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID-8073;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLU2_LOPAM
P04092;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROCESSING
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEPTIDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROPEP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Gaps

Gaps

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SCYCA

SEQUENCE. TISSUE-Pancreas;

SOW WHAT WAY A VALUE OF THE WAY

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C -1- MISCELLANEOUS: X'S IN THE SEQUENCE WERE INCLUDED BY HOMOLOGY WITH

AMERICAN GOOSEFISH SEQUENCES.

-1 MISCELLANEOUS: GLIN-14 IS A UNIQUE SUBSTITUTION FROM LEUCINE IN

COTHER KNOWN GLUDAGON SEQUENCES AND GLUCAGON-LIKE PEPTIDES.

-1 SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

COTHER KNOWN GLUDAGON SEQUENCES AND GLUCAGON-LIKE PEPTIDES.

NE RIS, PRO103; GCONC.

R HSSP: POTO13; A DATOGOS; 2.

R HSSP: POTO124; JGCN.

R RSP: PRO0123; A DATOGOS; 2.

R RSP: PRO0125; A DATOGOS; 2.

R RAPAT; SMO0070; GLUCAGON; 2.

R RAPAT; SMO0070; GLUCAGON; 2.

R GLUCAGON FAMILY.

R PROTIES: PSO0260; GLUCAGON; 2.

R PROTIES: PSO0260; GLUCAGON; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P01277;
21-JUL-1986 (Rel. 01, Created)
01-AGG-1990 (Rel. 15, Last sequence update)
01-AGG-1990 (Rel. 18, Last annotation update)
Glucagon precursor.
Gallus gallus (Chicken), and
Meleagris gallopavo (Common turkey).
Meleagris gallopavo (Common turkey).
Archosauria; Aves; Neognathae; Galliformes; Phaslanidae; Phaslaninae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HORM. MOEAD. Res. 4:360-363(1972).

-i - FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES

-i - FUNCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS

-i - INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS

IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

-i - MISCELLANBOOS: THE COMPOSITION OF TURKEY GLUCAGON APPEARS TO BE

IDENTICAL WITH CHICKEN.

-i - MISCELLANGOUS: CHICKEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Nucleotide sequence determination of chicken glucagon precursor cDNA. Chicken preproglucagon does not contain glucagon-like peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-7605027, PubMed=1194290; PEDLINE-7607, Kilmel J.R.; Pollock H.G., Kilmel J.R.; "Chicken glucagon. Isolation and amino acid sequence studies."; J. Biol. Chem. 250:9377-9380(1975).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPECIES-M.gallopavo;
MEDLINE-73074118; PubMed-4645932;
Markussen J., Frandsen E.K., Heding L.G., Sundby F.;
"Turkey glucagon: crystallization, amino acid composition and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPECIES-Chicken; TISSUE-Pancreas;
MEDLINE-90249492; PubMed-2338135;
Hasegawa S., Terazono K., Nata K., Takada T., Yamamoto H.,
                                                                                                                                                                                                                                                                                                                                                                  Score 88; DB 1; Length 68; Pred. No. 9.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                                        5; Indels
                                                                                                                                                                                                                                                                                         38 68 GLUCAGON-LIKE PEPTIDE.
68 68
68 Aa; 7810 MW; 50D14214FF204C04 CRC64;
                                                                                                                                                                                                                                                                    GLUCAGON.
GLUCAGON-LIKE PEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151 AA.
                                                                                                                                                                                                                                                                                                                                                                                                          11; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |:|||:||:||:|
38 HADGTYTSNVSTYLQDQAAKDFVSWLKSG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPOSITION, AND SEQUENCE OF 55-83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEBS Lett. 264:117-120(1990).
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 44.8%;
Matches 13; Conservative 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9031, 9103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   [2]
SEQUENCE OF 55-83.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1mmunology.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GLUC_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Okamoto H.
                                                                                                                                                                                                                                                                                         PEPTIDE
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
GLUC_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-86214328; PubMed-3520699;
Plisetskaya E., Pollock H.G., Rouse J.B., Hamilton J.W., Kimmel J.R.,
Gorbman A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Isolation and structures of coho salmon (Oncorhynchus kisutch) glucagon and glucagon.like peptide."; Regul. Pept. 14:57-67(1986).

-1. FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES THE BLOOD SUGAR LEWEL.

-1. INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                              Scyllorhinus canicula (Spotted dogfish) (Spotted catshark).
Scyllorhinus canicula (Spotted dogfish) (Spotted catshark).
Bukaryota Metazoa; Chordata; Cranlata; Vertebrata; Chondrichthyes;
Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
Scyllorhinidae; Scyllorhinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-ARR-1988 (Rel. 07, Created)
01-ARR-1988 (Rel. 07, Last sequence update)
01-NOV-1990 (Rel. 16, Last annotation update)
01-NOV-1990 (Rel. 16, Last annotation update)
01-NOV-1990 (Rel. 16, Last annotation update)
01-NOV-1990 (Rel. 16, Last annotation)
01-NOV-1990 (Rel. 16, Last annotation)
01-NOV-1990 (Rel. 18, Nepterygil; Teleostei, Euteleostei)
01-NOV-1990 (Rel. 18, Nepterygil; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 88; DB 1; Length 29;
Pred. No. 3.6e-05;
5; Mismatches 8; Indels
                                                                                                                                                         01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-JAN-1990 (Rel. 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68 AA.
                                                                                                                     29 AA.
                     HAEGIYTSDVSSYLQDQAAKEFVSWLKTG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HSDGTFTSDLSKQMEEEAVRLFIEWLKN 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-87190953; PubMed-3569517;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 42.3%;
Local Similarity 53.6%;
Les 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                       STANDARD;
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NCBI_TaxID=8019

SEQUENCE.

GLUC_ONCKI

RESULT 11 GLUC_ONCKI

Query Match Best Loca Matches

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IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION----SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
PIR: 809948; GCFLE.
PIR: A61135; A61135.
                                                                                                            PROSITE; PS00260; GLUCAGON; 1. Glucagon family; Hormone. SEQUENCE 29 AA; 3508 MW; 7'
                                              HSSP, P01274; IGCN.
InterPro, IPR00552; Glucagon.
Pfam; PF00123; hormone2; 1.
PRINTS; PR00275; GLUCAGO.
SMART; SM00070; GLUCA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40.9%;
                                                                                                                                                              40.9%;
50.0%;
                                                                                                                                                                         Best Local Similarity 50.09
Matches 14, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=7788;
                                                                                                                                                                                                                                                                                                  GLUC_TORMA
P09567;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  marmorata."
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE.
                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GLUC_MYOSC
ID GLUC_M
AC P09686
DT 01-MAR
DT 01-MAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                    PROSITE; PS00260; GLUCAGON; 3.
Glucagon family; Hormone; Cleavage on pair of basic residues; Signal;
Amidation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPECIES-T. Obesus; TISSUE-Pancreas;
MEDLINE-9200994; PubMed-1916209;
MEDLINE-92009994; PubMed-1916209;
Mavarro 1., Gutierrez J., Calaxeh J., Rivera J., Planas J.;
Mavarro 1., Gutierrez J., Calaxeh J., Rivera J., Planas J.;
Misolation and primary structure of glucagon from the endocrine pancreas of Thunnus obesus.";
Gen. Comp. Endocrinol. 83:227-232(1991).
Gen. Comp. Endocrinol. 83:227-232(1991).
THE BLOOD SUGAR LEVEL.
-I- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS
                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                      AMIDATION (G-148 PROVIDE AMIDE GROUP).
B6C0D87536C0AEB5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thunnus obesus (Bigeye tuna).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii: Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Pleuronectiformes;
Pleuronectoidei; Pleuronectidae; Platichthys.

NCBL_TAXID-8260, 8241;
                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41.3%; Score 86; DB 1; Length 151; 48.3%; Pred. No. 0.00043;
                                                                                                                                                                                                                                                                                                                                                                              Score bu, Pred. No. 0.00043;
                                                                                                                                                                                                                                                                                                                             GLUCAGON-LIKE PEPTIDE
                -1- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-NOV-1991 (Rel. 20, Created)
01-NOV-1991 (Rel. 20, Last sequence update)
01-JUN-1994 (Rel. 29, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Platichthys flesus (European flounder), and
                                                                                                                                                                                                                                                                                                                                                                                                      8; Mismatches
                                                                                                                                                                                                                                                                                         PROGLUCAGON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Comp. Endocrinol. 66:203-209(1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                            1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                    GLUCAGON
                                                                                                                                                                         HSSP, PO1274; IGCN.
InterPro; IPR000532; Glucagon.
Pfam; PF00123; hormone2; 2.
PRINTS; PR00275; GLUCAGON.
SWART; SN00070; GLUCA; 2.
                                                                                                                                                                                                                                                                                                                                                      17520 MW;
    GLUCAGON-LIKE PEPTIDE II
                                                                                                                                        EMBL; Y07539; CAA68827.1; -.
                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 48.3
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                             22
151
83
118
147
                                                                                                                                                     PIR; S09992; GCCH.
PIR; A91740; A91740.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GLUC_PLAFE
P23062;
                                                                                                                                                                                                                                                                                                                          PEPTIDE
MOD_RES
SEQUENCE
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SEOUENCE
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Gen. Comp. Endocrinol. 60:398-405(1985).
-!- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES THE BLOOD SUGAR LEVEL.
-!- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.
-!- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.
PIR: S07211; 507211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conlon J.M., Thim L.; "Primary structure of glucagon from an elasmobranchian fish. Torpedo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Torpedo marmorata (Marbled electric ray).
Bukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Chondrichthyes;
Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Torpediniformes; Torpedinoidei; Torpedinidae; Torpedo.
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Pred. No. 8.8e-05;
6; Mismatches 8; Indels
                                                         Score 85, DB 1; Length 29;
Pred. No. 8.8e-05;
7; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29 AA; 3511 MW; 04D96392086F0227 CRC64;
3508 MW; 77D5943208662E52 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-MAR-1989 (Rel. 10, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                              29 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6; Mismatches
                                                                                                                     7; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HSEGTFTSDYSKYLDNRRAKDFVQWLMN 28
                                                                                                                                                                                  1 HSDGTFTSDLSKQMEEEAVRLFIEWLKN 28
                                                                                                                                                                                                                        1 HSEGTFSNDYSKYLETRRAQDFVQWLKN 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Pancreas;
MEDLINE-86083105; PubMed-4076759;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interpro; IPR00553; Glucagon.
Pfam; PF00123; hormone2; 1.
PRINTS; PR00275; GLUCAGON.
SMART; SM00070; GLUCA, 1.
PROSITE; PS00260; GLUCAGON; 1.
Glucagon family; Hormone.
SEQUENCE 29 AA; 3511 MW; 04D
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DT 16-OCT-2001 (Rel. 40, Last annotation update)

C Glucagon percursor (Contains: Glicentin-related polypeptide (GRPP);

SG Myoxocephalus scorplus (Shorthorn sculpin) (Daddy sculpin)

C Glucagon. Glucagon-like peptide] (Fragment)

C Garantbomorphais Acanthopterygii; Neopterygii; Neopterygii
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Search completed: March 28, 2003, 08:37:51 Job time : 25 secs

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March 28, 2003, 08:33:48 ; Search time 85 Seconds
(without alignments)
94.539 Million cell updates/sec
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208
1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                 671580 seqs, 206047115 residues
                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                     OM protein - protein search, using sw model
                                                                                                                                                                                                                                              BLOSUM62
Gapop 10.0 , Gapext 0.5
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1: $P_archea:*
2: $P_barcher!a:*
3: $p_tungi:*
4: $p_tungi:*
5: $p_tunen:*
5: $p_tunen:*
7: $p_mammal:*
7: $p_mammal:*
8: $p_organelle:*
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Maximum DB seq length: 2000000000
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Perfect score:
Sequence:
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Pred. No. 1s the number of results predicted by chance to have a	score greater than or equal to the score of the result being printed,	and is derived by analysis of the total score distribution.
Pred. No.	score grea	and is der

sp_virus:*
sp_vertebrate:*
sp_unclassified:*

sp_plant:* sp_rodent:* sp_bacterlap:*
sp_archeap:*

Ogusq@ schizosacch Ogs3pg oryza sativ Og85sl bacillus ha Og36c2 streptococcu Og94g0 clostridum O22678 avena sativ Og02d7 mus musculu Og94g2 arabidopsis Og1y2g arabidopsis Og1y2g arabidopsis Og1y2g arabidopsis Og1y67 arabidopsis Og1y69 caenorhabdi Og1y69 caenorhabdi Og1y69 caenorhabdi Og1y69 caenorhabdi Og1y69 caenorhabdi Og1y67 arabidopsis Og1y69 caenorhabdi Og1y67 arabidopsis Og1y69 caenorhabdi Og1y67 arabidopsis	O9ye06 aeropyrum p
3 Q9USQB 10 QBS3P9 2 Q9AR2 2 Q9AR2 2 Q9AR2 10 Q22Z7 10 Q2ZZ7 10 Q9YZG7 10 Q9YZG7 11 Q9YZG7 12 Q9YRG7 12 Q9YRG7 13 Q9Q9ZG7 13 Q9Q9ZG7 13 Q9Q9ZG7 13 Q9Q9ZG7 14 Q9ZG7 10 Q9YZG7 10 Q9YZG7 10 Q9YZG7 11 Q9ZZG7 11 Q9ZZG7 12 Q9ZG8 12 Q9ZG9 12 Q9ZG9 13 Q9ZG9 14 Q9ZG9 15 Q9ZG9 16 Q9ZG9 16 Q9ZG9 17 Q9ZG9 18 Q9ZG9 18 Q9ZG9 18 Q9ZG9 19 Q9ZG9 10 Q9	17 Q9YE06
539 6104 6104 6104 6108 6109 6109 6109 6109 6109 6109 6109 6109	310
24444444444444444444444444444444444444	
COR CORCUS CO	54
	45

ALIGNMENTS

,			[precursor [Contains: Glucagon; glucagon-like peptide 1A glucagon-like peptide 1B (GLP-1B): glucagon-like peptide 1C			Suteleostom1;	Pipidae;						Pederson R.A.,		"The Xenopus proglucagon gene encodes novel GLP-1-11ke peptides with			-1- FUNCTION: PROMOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES		AND 2; ARE										Glucagon family; Hormone; Signal; Cleavage on pair of basic residues;		
266 AA.	Created) Last sequence update)	ation update)	<pre>precursor [Contains: Glucagon; glucagon-like peptide lA glucagon-like peptide lB (GLP-1B); glucagon-like peptide</pre>	-2)].		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;	Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;			CNIOIT	Troping.		Brubaker P.L., I		novel GLP-1-11		7920(1997).	LYCOGEN AND LIE		ALTERNATIVE PRODUCTS: 2 ISOFORMS; 1 (SHOWN HERE) AND		N FAMILY.								vage on pair of	•	
PRT; 2	05, Created) 05, Last seque	(TrEMBLrel, 17, Last annotation update)	tains: Glucago eptide 1B (GL	peptide 2 (GLP-2)].	lawed frog).	ata; Craniata	a; Mesobatrac			T TENDENSTIVE CO	TO THE PARTY OF TH	9223287;	Υ.,		gene encodes	Έ.	S.A. 94:7915-	DROLYSIS OF G		2 ISOFORMS;	VE SPLICING.	BELONGS TO THE GLUCAGON FAMILY.	1;		agon.	5.	_•		Z; 5.	Signal; Clea	tive spiicing	TOT THE TOT
PRELIMINARY;	(TrEMBLrel. 0	(TrEMBLrel, 1	precursor (Con lucadon-11ke p	(GLP-1C); glucagon-like p	Xenopus laevis (African clawed frog).	Metazoa; Chord	atrachia; Anur	Xenopus.		LIJ	DE N. D. J. DINE.	TISSUE=PANCKEAS; MEDI,INE=97368292; PubMed=9223287;	Irwin D.M., Satkunarajah M., Wen Y.,		s proglucagon	insulinotropic properties.";	Proc. Natl. Acad. Sci. U.S.A. 94:7915-7920(1997)	N: PROMOTES HY	THE BLOOD SUGAR LEVEL.	TIVE PRODUCTS:	O BY ALTERNATI	ITY: BELONGS T	EMBL; AF004432; AAB65660.1;	4) IGCN.	InterPro; IPR000532; Glucagon.	Pfam; PF00123; hormone2;	PRINTS; PR00275; GLUCAGON.	SMART; SM00070; GLUCA; 5.	PROSITE; PS00260; GLUCAGON; 5.	nily; Hormone;	Multigene ramily; Alternative splicing.	-
JLT 1 [43] 042143 042143	01-JAN-1998 01-JAN-1998	01-JUN-2001	Glucagon I p	(GLP-1C); g	Xenopus lae	Eukaryota; 1	Amphibia; Ba	Xenopodinae; Xenopus	NCB1_10A1D=0333;	CEOTTENCE DE	THE PERSON NAMED IN	TISSUE-PANCKEAS; MEDITNE-97368292	Irwin D.M.,	Wheeler M.B.;	"The Xenopus	insulinotrop	Proc. Natl.	-1- FUNCTION	THE BLOC	-1- ALTERNA		-!- SIMILARITY:	EMBL; AF004	HSSP; POIZ/4; IGCN	InterPro; II	Pfam; PF001;	PRINTS; PRO	SMART, SMOO	PROSITE; PS	Glucagon far	Multigene ta	TONOTO
RESULT 042143 ID 04	검검	DT	DE	DE	SO	8	8	88	5 6	2 0	4 6	2 X	R	RA	RT	RT	RL	ပ္ပ	ပ္ပ	ပ္ပ	ပ္ပ	ပ္ပ	S G	S C	D.K	DR	DR	DR	DR	X	¥ E	:

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Hoplobatrachus.
                        Proglucagon
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Best Local
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                                                                                Gaps
                                                                                                                                                                    01-TAN-1998 (TrEMBLrel. 05, Created)
01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-JAN-1998 (TrEMBLrel. 17, Last annotation update)
Glucagon II precursor [Contains: Glucagon; glucagon-like peptide lA (GLP-1A); glucagon-like peptide lB (GLP-1B); glucagon-like peptide l
                                                                                                                                                                                                                                                                                MEDLINE-97368292; PubMed-9223287;
Irwin D.M., Satkunarajah M., Wen Y., Brubaker P.L., Pederson R.A.,
Wheeler M.B.;
                                                                                                                                                                                                                  Xenopus laevis (African clawed frog).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52.4%; Score 109; DB 13; Length 219; 53.1%; Pred. No. 1.4e-06; tive 11; Mismatches 4; Indels
                                                              ch 56.2%; Score 117; DB 13; Length 266; 1. Similarity 59.4%; Pred. No. 1.5e-07; 19; Conservative 10; Mismatches 3; Indels
       GLOCAGON-LIKE PEPTIDE IA.
GLOCAGON-LIKE PEPTIDE IB.
GLOCAGON-LIKE PEPTIDE IC.
GLOCAGON-LIKE PEPTIDE IC.
MISSING (IN ISOFORM 2).
W; 544F7BBC20AF872C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                           133 GLUCAGON LIKE PEPTIDE 1A.
173 GLUCAGON-LIKE PEPTIDE 1B.
211 GLUCAGON-LIKE PEPTIDE 1C.
25271 MW. ACC699233C362CEO CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220 AA
                                                                                                                                                      219 AA.
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                                                                                                        1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPS 32
                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                      GLUCAGON
   GLUCAGON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                 142 173 GLU
180 211 GLU
227 259 GLU
214 261 MIS
266 AA; 30951 MW; 5
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180
219 AA;
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Matches 17; Conserva
                                                                                                                                                                                                                                             Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       Multigene family.
SIGNAL 1
                                                                                                                                                                                                                                                    NCBI_TaxID-8355
                                                                                                                                                                                                                                                                            LISSUE-PANCREAS
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SEQUENCE
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PEPTIDE
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Q8UWL9
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"Identification of a proglucagon cDNA from Rana tigrina rugulosa that morodes two GIP-18.";
Gen. Comp. Endocrinol. 124:0-0(2001).

EMBL; AF324209; AAL35758.1; -.

InterPro; IPR000332; Glucagon.

PRIMTS; PR00213; hormone2; 4.

PRIMTS; PR00275; GLUCAGON.

SMART; SN00070; GLUCAA. 4.
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MEDLINE-95295739; PubMed-7776976;

ITWIN D.M., Wong J.:

ITWIN T.M., Wong J.:

ITWIN C.M., Wong J.:

ITWIN C.M., Wong J.:

ITWIN C.M., Wong J.:

ITWIN C.M., Wong J.:

ITWIN C.M. WONG J.:

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091409; 091232; 091232;
01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
PROGLUCAGON (Fragment).
01-DEC-2001 (Fragment).
01-ORD-CAGON (Fragment).
01-
                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;
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47.6%; Score 99; DB 13; Length 22
Best Local Similarity 44.4%; Pred. No. 3.1e-05;
Matches 16; Conservative 9; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE: PSO0260; GLUCAGON; UNKNOWN_4.
SEQUENCE 220 AA; 25615 MW; C72D926E7F89E381 CRC64;
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SEQUENCE 72 AA; 8293 MW; 8584352B1C260A31 CRC64;
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01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAP 36
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HADGIYTSDVSTYLQDQAAKDFVSWLKSG 67
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                                                                                                                                                                                                                                                                                            Hoplobatrachus rugulosus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=110072;
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RESULT

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PROSITE; PS00260; GLUCAGON; 2.
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PEPTIDE
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Matches
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Q9PRW9
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TISSUED-DISTAL SMALL INTESTINE, AND PANCREAS;

WEDLINE-95295739; PubMed-7776976;

ITWIN D.M., Wong J.,

IT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1996 (TrEMBLrel. 17, Last annotation update)
01-UND-2001 (TrEMBLrel. 17, Last annotation update)
Glucagon II precursor.
Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryotas Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygil; Neopterygil; Teleostei; Euteleostei;
Protacanthopterygil; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                 Glucagon I precursor.

Otheorhynchus mykiss (Rainbow trout) (Salmo gairdneri).

Rharyota; Mertazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;

Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.

NCBI_TaxID=8022;
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0
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GLUCAGON-LIKE PEPTIDE 2.
MISSING (IN PANCREATIC ISOFORM).
5 GCF6980CF2A9D58E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 44.7%; Score 93; DB 13; Length 178;
48.3%; Pred. No. 0.00016;
tive 10; Mismatches 5; Indels
                                Q91971; Q91408; Q91188; Q92169;
01-NOV-1996 (TYEMBLEAL 01, Greated)
01-NOV-1996 (TYEMBLEAL 01, Last sequence update)
01-JUN-2001 (TYEMBLEAL 17, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52 80 GLU
85 120 GLU
137 169 GLU
124 178 MIS
178 AA; 20034 MW; 5
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Pfam; PF00123; hormone2; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00275; GLUCAGON.
SMART; SM00070; GLUCA; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
wes 14; Conserv
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SEQUENCE
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Matches
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REP SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.

TISSUE-DISTAL SWALL INTESTINE, AND PANCREAS;

RX MEDLINE-92295739; PubMed=7776976;

Irwin D.M., Woong J.;

Irwin D.M., Woong J.;

Irwin D.M., Woong J.;

Trout and chicken proglucagon: alternative splicing generates mRNA transcripts encoding glucagon-like peptide 2.";

Mol. Endocrinol. 9:267-277(1995).

-I- FUNCTION: PROMOTES HYDROLYSIS OF GLXCOGEN AND LIPIDS, AND RAISES

THE BLOOD SUGAR LEVEL (BY SIMILARITY: SPLICING.

-I- FUNCTION: PRODUCED BY ALTERNATIVE SPLICING.

-I- ALTERNATIVE PRODUCED BY ALTERNATIVE SPLICING.

-I- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

DR RESPONSE TO A DROP IN BLOOD SIGAR CONCENTRATION.

-I- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

DR REMEL; U19915; AAC60210:1; -..

DR REMEL; U19915; AAC60210:1; -..

DR REMEL; U19915; AAC60209:1; -..

DR REMEL; U19915; AAC60209:1; -..

DR RISSP; PRODUZES: BROODS SILVE ARE SERVED: U19915; AAC60209:1; -..

DR REMEL; U19915; AAC60209:1; -..

DR RINC: PRODUZES: GLUCAGON.

PRINTS: PRODUZES: GLUCAGON.

PRODUZES: GLUCAGON.

PRODUZES: GLUCAGON.

PRODUZES: GLUCAGON
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pair of basic residues; Signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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GLUCAGON-LIKE PEPTIDE 2.
MISSING (IN PANCREWTIC ISOFORM).
FE89D73866CD91C66 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     44.7%; Score 93; DB 13; Length 178; nilarity 48.3%; Pred. No. 0.00016; Conservative 10; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   62 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00260; GLUCAGON; UNKNOWN_2. Glucagon family; Hormone; Cleavage on p Alternative splicing; Multigene family. 1 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |:|||:|||:|
90 HADGIYITSDVSTYLQDQAAKDFVSWLKSG 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178 AA; 19998 MW;
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es 14; Conserv
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SEQUENCE
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Glucagon family; Hormone; Signal; Cleavage on pair of basic residues;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gen. Comp. Endocrinol. 91:96-104(1993).
-!- FUNCTION: PROWOTES HYDROLYSIS OF GLYCOGEN AND LIPIDS, AND RAISES
-!- SIMILARITY: BELOOMS TO THE GLUCAGON FAMILY.
-!- SIMILARITY: BELOOMS TO THE GLUCAGON FAMILY.
-!- SIMILARITY: PARF091086.1; -.
HSSP: PO1275; 1BH0.
InterPro; IPR000532; Glucagon.
PRINTS; PR00123; Acrimone2; 2.
PRINTS; PR00175; GLUCAGON.
SWART; SM00070; GLUCA; 2.
                                                                                                                                          Gaps
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MEDILINE-94010172; PubMed-8405897;

GONION J.M., NHelsen P.F., Youson J.H.;

FPILMARY STRUCTURES of glucagon and glucagon-like peptide isolated from the intestine of the parasitic phase lamprey Petromyzon marinus.";
                                                                                                                                                                                                                                                                                    OSPURI, OSPRZB; OSPRZJ; 13, Created)
O1-MAY-2000 (TERMELT); 13, Created)
O1-MAY-2000 (TERMELT); 13, Last sequence update)
O1-MAY-2000 (TERMELT); 19, Last annotation update)
O1-DE-2001 (TERMELT); 19, Last annotation update)
GLEP-1); glucagon I precursor (Contains: Glucagon; glucagon; like peptide 1 (GLP-1); glucagon-like peptide 2 (GLP-2);
Everromyzon marinus (Sea lamprey).
Everromyzon marinus (Sea lamprey).
Petromyzontiformes; Petromyzontidae; Petromyzon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-20022986; PubMed-10555286;
Irwin D.M.; Huner O., Youson J.H.;
"Lamprey proglucagon and the origin of glucagon-like peptides.";
Mol. Blob: Evol. 16:1548-1557(1999).
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                                                                                                       Score 87.5; DB 13; Length 62; Pred. No. 0.00026;
                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLUCAGON-LIKE PEPTIDE 1.
GLUCAGON-LIKE PEPTIDE 2.
9 9A52C530D5A74072 CRC64;
                                                           GLUCAGON-LIKE PEPTIDE.
CSFF487C12C69CD1 CRC64;
                                                                                                                                                                                      'I HSDGTFTSDLSKOMEEEAVRLFIEWL---KNGGPSSG 34
                                                                                                                                                                                                                                                                                   160 AA
                                                                                                                          Pred. No. 0.000
6; Mismatches
              GLUCAGON-29.
GLUCAGON-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL
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                                                                                                                                                                                                                                                                                   PRT;
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160 AA; 18042 MW;
               29
33
34
62
7270 MW;
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                                                                                                       Match 42.1%;
focal Similarity 45.9%;
es 17; Conservative
Glucagon family; Hormone PEPTIDE 1 29
                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                           62 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-INTESTINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Multigene family.
                                           NON_CONS
PEPTIDE
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PEPTIDE
SEQUENCE
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                                                                                                         Query Match
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Matches
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SEQUENCE FROM No., ALTERNATIVE SPLICING, AND TISSUE SPECIFICITY.

RA Chen Y.E., Drucker D.J.;

REDLINE-97172477; PubMed-9020121;

RA TISSUE-EXPENSION OF UNIQUE MRNAS that encode proglucagon-
ALTERNATIVE SPECIFIC expression of unique mRNAs that encode proglucagon-
TISSUE-SPECIFIC expression of unique mRNAs that encode proglucagon-
RT TISSUE-SPECIFIC EXPENSION OF UNICACEN AND LIPIDS, AND RAISES
THE BLOOD SUGAR LEVEL (BY SIMILARITY).

- I FUNCTION: PROMOTES 4156(1997).

- I FUNCTION: PROMOTES 1 SOFORM: LPI I (SHOWN HERE) AND LPI; ARE
PRODUCED BY ALTERNATIVE SPLICING:

- I SISSUE SPECIFICITY: ISOFORM LPI I IS REFRICTED TO THE
PRODUCED BY ALTERNATIVE SPLICING.

- I SISSUE SPECIFICITY: ISOFORM LPI I IS REFRICTED TO THE
PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN
RESTINE. EXPRESSION OF ISOFORM LPI IS RESTRICTED TO THE
PROMOTEDS. NEITHER ISOFORM IS DETECTED IN SALIVARY GLAND.

- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN
RESPONSE TO A DROP IN BLOOD SUGAR CONCENTRATION.

- INDUCTION: PRODUCED IN THE A CELLS OF THE ISLETS OF LANGERHANS IN
REMBL: U77611; AABS1129.1;

- SIMILARITY: BELOAGS TO THE GLUCAGON FAMILY.

- SIMILARITY: BELOAGS TO THE GLUCAGON FAMILY.

- SHALLY IGCN.
RESSP. POLO23; GLUCAGON.

- RESPRESSION OF ISOFORM LPI IS RESTRICTED TO
RESPECTED TO THE GLUCAGON.

- RESPRESSION OF ISOFORM LPI IS RESTRICTED TO
RESSP. POLO23; GLUCAGON.

- RESPRESSION OF ISOFORM LPI IS RESTRICTED TO
RESPRESSION OF ISOFORM LPI ISOFORM L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.

GRPP (GLICENTINE RELATED POLYPEPTIDE).

GLUCAGON-LIKE PEPTIDE 1.

GLUCAGON-LIKE PEPTIDE 2.

D -> E (IN ISOFORM LPI).

MISSING (IN ISOFORM LPI).

MISSING (IN ISOFORM LPI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus (Chicken).
Eukaryota, Metazoa, Chordata, Crâniata, Vertebrata, Euteleostomi,
Archosauría, Aves; Neognathae, Galliformes, Phasianidae, Phasianinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Lepidosauria: Squamata, Scleroglossa; Anguimorpha, Helodermatidae;
                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., ALTERNATIVE SPLICING, AND TISSUE SPECIFICITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41.8%; Score 87; DB 13; Length 204; 51.7%; Pred. No. 0.0012; tive 6; Mismatches 8; Indels
                                                                01-JUL-1997 (TrEMBLrel. 04, Created)
01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
Glucagon precursor.
Heloderma suspectum (Gila monster).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206 AA
                        204 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1996 (TrEMBLrel, 01, Created)
01-NOV-1996 (TrEMBLrel, 01, Last sequ
01-DEC-2001 (TrEMBLrel, 19, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                        PRT;
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O12956
ID 012956 PRELIMINARY;
AC 012956; 012955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         204 AA;
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es 15; Conserv
                                                                                                                                                                                                                       Heloderma.
NCBI_TaxID=8554;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus.
NCBI_TaxID-9031;
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proglucagon
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VARSPLIC
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PEPTIDE
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Q91410;
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Q91410
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Gaps

1 HSDGTFTSDLSKQMEEEAVRLFIEWL---KNGG 30

RESULT 9

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MEDLINE-20022986; PubMed-10555286;
A Irwin D.M., Huner O., Youson J.H.;
"Lamprey proglucagon and the oxigin of glucagon-like peptides.";
"I SIMILARITY: PROMOTION: PROMOTION: THE BLOOD SUGAR LEVEL.
"- SIMILARITY: BELONGS TO THE GLUCAGON FAMILY.

REMBL, AR1597098; ARF03187.1; -.
REMBL, REMST: PRO0125; LBHO.
REMBL: PRO0125; LBHO.
REMBL: PRO0125; DATOG.; 2.
RR PROMIT: PRO0125; GLUCAGON; 2.
RR PROSIT: SNO0260; GLUCAGON; 2.
RR PROSIT: PRO0260; GLUCAGON; 2.
RR MART: SNO070; GLUCAGON; 2.
RR MULTIGENE family; Hormone; Signal; Cleavage on pair of basic residues; M. Multigene family:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 7 POTENTIAL.
44 72 GLUCAGON-LIKE PEPTIDE.
89 120 GLUCAGON-LIKE PEPTIDE.
120 Aa; 13397 MW; FBDE667B96E198D8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGG 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 43.33
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polyprotein.
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
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Q9DDE6
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SEQUENCE FROM N.A. MEDLINE-95295739; PubMed-7776976; Irwin D.M., Wong J.; Trwin D.M., Wong J.; "Trout and chicken proglucagon: alternative splicing generates mRNA transcripts encoding glucagon-like peptide 2."; Mol. Endocrinol. 9:267-277(1995). EMBI: S78477; ABR34506.1; -. HSSP: PO1274; 1GCN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Canis familiaris (Dog).
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
NCBL_TaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Irwin D.M.; "cDNA clouing of proglucagon from the stomach and pancreas of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Glucagon II precursor [Contains: Glucagon; glucagon-like peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Petrómyzon marinus (Sea lamprey).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Hyperoartia;
Petromyzontiformes; Petromyzontidae; Petromyzon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 41.3%; Score 86; DB 13; Length 206; Best Local Similarity 50.0%; Pred. No. 0.0016; Matches 14; Conservative 9; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Watch 40.9%; Score 85; DB 6; Length 180; Local Similarity 51.7%; Pred. No. 0.0019; les 15; Conservative 6; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Subjitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF308439; AAL09425.1; -.
InterPro; IPR000332; Glucagon.
Pfam, PF00123; hormone2.
PROSITE; P800260; GLUCAGON; UNKNOWN.3.
SEQUENCE 180 AA; 21114 MW; 80F6694IAFC324FD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                             23875 MW; AB299E1B02FC6AÁ4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-2001 (TrEWBLrel. 19, Created)
01-DEC-2001 (TrEWBLrel. 19, Last sequence update)
01-MAR-2002 (TrEWBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 180 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 HSDGTFTSDLSKQMEEEAVRLFIEWLKN 28
                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE, PS00260; GLUCAGON; 3.
SEQUENCE 206 AA; 23875 MW:
                                                                                                                                                                                                                                                                   Interpro; IPR000532; Glucagon.
Pfam; PF00123; hormone2; 3.
PRINIS; PR00275; GLUCAGON.
SMART; SM00070; GLUCA; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
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TISSUE-INTESTINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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Q9PURO;
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Q95LG0
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0; Gaps

39.9%; Score 83; DB 13; Length 120; 43.3%; Pred. No. 0.0022; tive 9; Mismatches 8; Indels

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Gaps
                                                                                                                                                                                                                                                                                                                 Brachydanio rerio (Zebrafish) (Zebra danio).
Bukaryota, Metazoa: Chordata, Craniata; Vertebrata; Buteleostoml;
Cyptinopterygil; Neopterygil; Teleostei; Ostariophysi; Cypriniformes; Cyptinidae; Danio.
NCBL_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDIINE-99425190; PubMed-10495291;
Argenton F., Zecchin E., Bortolussi M.;
Early appearance of pancreatic hormone-expressing cells in the zebrafish embryo.";
Mech. Dev. 87:217-221(1999).
ESMBL, A.1133697; CGC20108.1; --
HSSP; P01274; IGCN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN 88 121 GLUCAGON-LIKE PEPTIDE 1. SEQUENCE 121 AA; 13537 MW; A85385F690DA180F CRC64;
                                                                                                                                                                                                       01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2011 (TrEMBLrel. 19, Last annotation update)
Glucagon polyprotein.
                                                                                                                                                          121 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 HSDGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGA 35
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                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZEIN; ZDB-GENE-010219-1; gcg.
InterPro: IPR000532; Glucagon.
Pfan; PF00123; hormone2; 2.
PRINTS; PR00275; GLUCAGON.
SMART; SM0070; GLUCA, 2.
PROSITE; PS00260; GLUCAGON; 1.
                                                                                                                                                          PRELIMINARY;
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Barloy-Hubler F., Bowser L., Capela D., Galibert F., Gouzy J.,
Gurjal M., Hong A., Huizar L., Hyman R.W., Kahn D., Kahn M.L.,
Kalman S., Keating D.H., Palm C., Peck M.C., Surzycki R., Wells D.H.,
Yeh K.-C., Davis R.W., Federspiel N.A., Long S.R.,
"Nucleotide sequence and predicted functions of the entire
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygil; Neopterygil; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygil; Percomorpha; Perciformes; Percoidei; NCBL_TaxID=109273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MR-2002 (TrEMBLrel. 20, Last annotation update)
01-MR-2002 (TrEMBLrel. 20, Last annotation update)
Hypothetical protein Ral127.
Ral127 OR SMA2063.
Rhizobium meilloti (Sinorhizobium meilloti).
Plasmid psymA (megaplasmid 1).
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
Rhizobiaceae; Sinorhizobium.
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Pred. No. 0.0059;
5; Mismatches 15; Indels
                                                                                                                                                                                                                                                                         Al-Wahrouki A.A., Irwin D.M., Youson J.H.;
"Rock Bass Proglucagon.";
Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AR190499; A8316778.1;
HSSP; P01274; 1GCN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           n; Plasmid; Complete proteome.
38706 MW; 2BDEF2867AD0475C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLUCAGON.
GLUCAGON-LIKE PEPTIDE 1.
GLUCAGON-LIKE PEPTIDE 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6435033EBDDC00CE CRC64;
                                                                   01-MAR-2001 (TIEMBLrel. 16, Created)
01-MAR-2001 (TIEMBLrel. 16, Last sequence update)
01-DEC-2001 (TIEMBLrel. 19, Last annotation update)
Proglicagon (Fragment).
Ambioplites rupestris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sinorhizoblum mellioti pSymA megaplasmid.";
Proc. Natl. Acad. Sci. U.S.A. 98:9883-9888(2001).
EMBL; AE001298; AAMG5785.1;
InterPro: IPR001005; Myb.DNA.binding
PROSITE; PS00037; WYB_1; UNKNOWN_1.
                                   96 AA.
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Pfam; PF00123; hormone2; 2.
PRINTS; PR00275; GLUCAGON.
SMRAT; SM00070; GLUCA; 2.
PROSITE; PS00260; GLUCAGON; UNKNOWN_1.
                                     PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                38.0%;
milarity 42.9%;
Conservative 5;
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96 AA; 11225 MW;
                                     PRELIMINARY;
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Best Local Similarity
Matches 15; Conserv
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SEQUENCE 34
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SEQUENCE
                                   09DG43
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Q92XW3
RESULT 14
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Query Match 29.8%; Score 62; DB 16; Length 347; Best Local Similarity 43.3%; Pred. No. 4.9; Matches 13; Conservative 5; Mismatches 12; Indels
                                                                                      10 LSKQMEEEAVRLFIEWLKNGGPSSGAPPPS 39
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272 LOWSVSEEADLLSLEWVESGGPSVSEPSRS 301

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Search completed: March 28, 2003, 08:39:25 Job time: 87 secs